

## **ALAGAPPA UNIVERSITY**



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## DIRECTORATE OF DISTANCE EDUCATION

# Master of Computer Applications 31554 / 34054

# **VISUAL BASIC .NET LAB**

V - Semester





**Directorate of Distance Education** 

## Master of Computer Applications V - Semester

31554 / 34054

# **VISUAL BASIC .NET LAB**

Reviewer		
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## SYLLABI VISUAL BASIC WITH .NET LAB

BLOCK 1 : SIMPLE APPLICATIONS
Simple Applications: Developing simple applications using VB.NET
a. Finding factorial Value
b. Money Conversion
c. Quadratic Equation
d. Temperature Conversion
e. Login control
Login form: Create and Validate Login Form, Program to design Class, Program to demonstrate
Inheritance, Polymorphism and Interfaces.
BLOCK 2 : CONTROLS
Controls: Advance Controls, Common Dialog Controls.
2. Adrotator Control
3. Calendar control
a. Display messages in a calendar control
b. Display vacation in a calendar control
c. Selected day in a calendar control using style
d. Difference between two calendar dates
4. Treeview control a) Treeview control and datalist b) Treeview operations
5. Validation controls
Active X Controls: Working with intrinsic controls and ActiveX controls
BLOCK 3 : MDI AND DATA CONTROLS
MDI: Application with multiple forms
Data controls: Application using data controls
BLOCK 3 : DIALOGS AND MENU
Dialogs: Application with dialogs
Common Dialogs: Application using Common Dialogs
Menus: Application with Menus
BLOCK 4 : EVENTS AND DATABASE
Events and Database: Drag and Drop Events Database Management Creating ActiveX Controls
DataGridView: ADO.NET Code to show records in DataGridView Control.
1. Databinding using datalist control
2. Datalist control templates
3. Databinding using datagrid
4. Datagrid control template
5. Datagrid hyperlink
6. Datagrid button column
7. Datalist event
8. Datagrid paging
Database operations: ADO.NET Code to perform Insert, Delete, Update and Select operations.
BLOCK 5 : CRYSTAL REPORTS AND WEB APPLICATION
Crystal Reports

**Web Application** using ASP.NET that uses validation controls.

Introduction

#### INTRODUCTION

NOTES

Visual Basic .NET or VB.NET, the next generation of the Visual Basic language, is a fast and easy way to create .NET-based applications, including XML Web services and Web applications. Visual Basic .NET has many new and improved features that make it a powerful object oriented programming language, including inheritance, interfaces, and overloading. Other new language features include free threading and structured exception handling. Visual Basic .NET also fully integrates the .NET Framework and the Common Language Runtime, which provide language interoperability, garbage collection, enhanced security, and improved versioning support. Visual Basic .NET is one of the two flagship languages (with C#) for the .NET framework from Microsoft. VB.NET includes full-blown support for object-oriented concepts, including simple inheritance. Everything in VB.NET is an object, including all of the primitives (Short, Integer, Long, String, Boolean, etc.) as well as types, events, and even assemblies. Everything inherits from the Object base class.

The most widely used commercial and open source databases are based on the relational model. Characteristically, a RDBMS is a DBMS in which data is stored in tables and the relationships among the data are also stored in tables. This stored data can be accessed or reassembled in many different ways without having to change the table forms. RDBMS program lets you create, update and manage a relational database. In spite of repeated challenges by competing technologies, as well as the claim by some experts that no current RDBMS has fully implemented relational principles, the majority of new corporate databases are still being created and managed with an RDBMS. So, understanding RDBMS through lab manuals has become extremely important.

This Lab Manual is intended for the students of M.Sc.-IT in the subject of *VB.NET and RDBMS*. This manual typically contains practical/Lab Sessions, covering various aspects related to the subject to enhanced understanding. Students are advised to thoroughly go through this manual rather than only topics mentioned in the syllabus as practical aspects are the key to understanding and conceptual visualization of theoretical aspects covered in the textbooks.

## Microsoft SQL Express 2005 database engine. 1. Write a program to generate the factorial of a given number. PublicClassForm1 PrivateSub Button1 Click(sender AsObject, e AsEventArgs) Handles Button1.Click Dim i AsInteger Dim a AsDouble Dim f AsDouble a = TextBox.Text f = 1i = 1 While i <= a f = f \* ii = i + 1 EndWhile Label3.Text = fEndSub PrivateSub Label2 Click(sender AsObject, e AsEventArgs) Handles Label2.Click EndSub PrivateSub Form1 Load(sender AsObject, e AsEventArgs) HandlesMyBase.Load EndSub EndClass

#### Software Requirements for Program Implementation

Microsoft Visual Studio 2010/2015, Asp .net Framework 3.0/3.5/4.0/4.5

#### **Hardware Requirements**

Any computer hardware capable of running DOS can be used.

#### **PROGRAMS:**

VB.NET & RDBMS Lab

#### NOTES

```
Output:
```

NOTES

2

Material



```
ElseIf ComboBox1.SelectedItem.Value = "Dollar"And
          ComboBox2.SelectedItem.Value = " Dollar"Then
           Label5.Text = amount &"Dollar"
ElseIf ComboBox1.SelectedItem.Value = "Japanese Yen"And
ComboBox2.SelectedItem.Value = "IndianRupees"Then
           Label5.Text = amount / 1.54 &"Indian Rupee"
ElseIf ComboBox1.SelectedItem.Value = "Japanese Yen"And
ComboBox2.SelectedItem.Value = " Dollar"Then
           Label5.Text = amount / 109.78 &"Dollar"
ElseIf ComboBox1.SelectedItem.Value = "Japanese Yen"And
ComboBox2.SelectedItem.Value = "Japanese Yen"Then
           Label5.Text = amount & "Japanese Yen"
Else
         :
             ComboBox1.SelectedItem.Value
                                                     =
ComboBox2.SelectedItem.Value
          MsgBox("You Select Same Currency")
EndIf
EndSub
PrivateSub TextBox1 TextChanged(sender AsObject, e
AsEventArgs) Handles TextBox1.TextChanged
EndSub
PrivateSub Label4 Click(sender AsObject, e AsEventArgs)
Handles Label4.Click
EndSub
PrivateSub Label5 Click(sender AsObject, e AsEventArgs)
Handles Label5.Click
EndSub
EndClass
```

#### **Output:**



VB.NET & RDBMS Lab

#### NOTES

```
VB.NET & RDBMS Lab
                  3. Write a program to find out roots of the quadratic equation.
                     PublicClassForm1
                     PrivateSub Button1 Click(sender AsObject, e AsEventArgs)
                     Handles Button1.Click
     NOTES
                     Dim a AsDouble
                     Dim b AsDouble
                    Dim c AsDouble
                    Dim s AsDouble
                    Dim x1 AsDouble
                    Dim x2 AsDouble
                            a = TextBox1.Text
                            b = TextBox2.Text
                            c = TextBox3.Text
                            s = Math.Sqrt(b * b - 4 * a * c)
                     If (b * b - 4 * a * c) = 0 Then
                                Label4.Text = "Result Is:"
                                Label5.Text = "Roots are Equal"
                                x1 = (-b + s) / 2 * a
                                x^2 = (-b - s) / 2 * a
                                Label4.Text = "Result Is:"
                                Label5.Text = "The Roots : "& x1
                    ElseIf (b * b - 4 * a * c) < 0 Then
                                Label4.Text = "Result Is:"
                                Label5.Text = "The Roots are Imaginary"
                    Else Label4.Text = "Result Is:"
                                Label5.Text = "The Roots are Not Equal"
                                x1 = (-b + s) / 2 * a
                                x2 = (-b - s) / 2 * a
                                Label4.Text = "Result Is:"
                                Label5.Text = "The Roots "& x1 &"or"& x2
                     EndIf
                     EndSub
                    PrivateSub Form1 Load(sender AsObject, e AsEventArgs)
                    HandlesMyBase.Load
                     EndSub
                    EndClass
    Self-Instructional
```

4 Material

#### **Output:**

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		Result is:	The Roots -27.5038345038256or-5308.49616549617				
		Label5.Text = "The f	toots : " & x1			Properties	+ 9 ×
		Label4.Text = "Result	c) < 0 inen t Is:"				
		Label5.Text = "The F Else Label4.Text = "Res	loots are Imaginary" At Is:"				
	100.96	Label5.Text = "The F	loots are Not Equal"				
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	Except	tion thrown: System.MissingMember tion thrown: System.InvalidCastEx	reption' in Microsoft.VisualBasic.dll				
	Except	tion thrown: 'System.InvalidCastEx	ception' in Microsoft.VisualBasic.dll				
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	-					-	

#### NOTES

## 4. Write a program to convert temperature from Fahrenheit to Celsius or vice versa.

#### PublicClassForm1

```
PrivateSub RadioButton1_CheckedChanged(sender AsObject,
e AsEventArgs) Handles RadioButton1.CheckedChanged
EndSub
PrivateSub RadioButton2_CheckedChanged(sender AsObject,
e AsEventArgs) Handles RadioButton2.CheckedChanged
EndSub
```

```
PrivateSub Button1_Click(sender AsObject, e AsEventArgs)
Handles Button1.Click
```

```
Dim a AsDouble
```

```
Dim f AsDouble
```

Dim c AsDouble

a = TextBox1.Text

#### If RadioButton1.Checked Then

```
c = (a - 32) * 5 / 9
```

Self-Instructional Material

```
VB.NET & RDBMS Lab
                                                                                                                                                                                                                                                                                Label4.Text = "Result is:"
                                                                                                                                                                                                                                                                                 Label5.Text = c \& "C"
                                                                                                                                                                               ElseIf RadioButton2.Checked Then
                                                                                                                                                                                                                                                   f = (a * 9 / 5) + 32
                                             NOTES
                                                                                                                                                                                                                                                                                Label4.Text = "Result is:"
                                                                                                                                                                                                                                                                                Label5.Text = f &"F"
                                                                                                                                                                              Else
                                                                                                                                                                                                                                                                              MsgBox("Select one Option")
                                                                                                                                                                               EndIf
                                                                                                                                                                               EndSub
                                                                                                                                                                               EndClass
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Dim f As Double

Dim f A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              App 🖓
                                                                                                                                                                                                                                       MsgBox("Select one Option")
End If
                                                                                                                                                                                                                                                                                                                                                                                     Convert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Result is:
                                                                                                                                                                                                                                                                                                                                                                                                        98.24F
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                                                                                                                                                                   5 Paragraph
                                                                                                                                                                                                                                                                                                                                                                                                                      15
                                                                                                                                                                                                                                                                                                                                                                     Temperature Converter
                                                                                                                                                                                                                                                                                                                         Sample
output
                                                                                                                                                                                                                                                                                                                                                                                                             Temperature Converter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P = 5 ×
                                                                                                                                                                                                                                                                                                                                                                                   er the Temperature 98.24
                                                                                                                                                                                                                                                                                                                                                                                                                         Fahrenheit To Celsius
                                                                                                                                                                                                                                                                                                                                                                                                                           💮 Celsius To Fahrenheit
                                                                                                                                                                                                                                                                                                                                                                                                          Convert
                                                                                                                                                                                                                                                                                                                                                                                               Result is:
                                                                                                                                                                                                                                                                                                                                                                                                                                      36.8C
```

Self-Instructional Material

### 5. Write a program to generate/develop the login control. Partial Class Default Inherits System.Web.UI.Page Protected Sub Login1 Authenticate (ByVal sender As Object, ByVal e As System.Web.UI.WebControls.AuthenticateEventArgs) Handles Login1.Authenticate If Login1.UserName = "Database" And Login1.Password = "Jaiswal" Then MsgBox("You are successfully Logged in") Else MsgBox("Error:Loggedin") End If If Application("i") = 3 Then MsgBox("You are Blocked") Login1.Enabled = False End If EndSub Protected Sub Page\_Load(ByVal sender As Object, ByVale As System.EventArgs) Handles Me.Load Application("i") = Int(Application("i") + 1) If Application ("i") > 3 Then Application ("i") = 0 End If End Sub End Class Global Application: <%@ Application Language="VB" %><script runat="server"> Sub Application Start (ByVal sender As Object, ByVal e As EventArgs) Application("i") = 0End Sub Sub Application End(ByVal sender As Object, ByVale As EventArgs) EndSub Sub Application Error (ByVal sender As Object, ByVale As EventArgs) EndSub Sub Session Start (ByVal sender As Object, ByVal e As EventArgs) EndSub Sub Session End(ByVal sender As Object, ByVale As EventArgs) EndSub </script>

VB.NET & RDBMS Lab

**NOTES** 

Self-Instructional Material

#### Output:

#### After enter the wrong password

Nome	Log In
NOTES	User Name: Rajeev
	Password
	Remember me next time
	our login attempt was not successful. Please try again
	Log In
	After log in three times the login will be blocked
	LogIn
	User Name: Rajeev
	Password
	Remember me next time.
	Log In
	Write a nue gram to questo an A duarticom ant using A duatator
0	. write a program to create an Advertisement using Ad rotator.
	<pre><?xml version="1.0" encoding="utf-8" ?></pre>
	<advertisements></advertisements>
	$\langle A \alpha \rangle$
	<pre><imageurl>.\image\pl.jpg</imageurl> </pre>
	<pre><navigateuri>www.pepsi.com</navigateuri></pre>
	<pre><alternativelext>Pepsi</alternativelext> contentstyle/ternativelext&gt; contentstyle/ternativelext&gt;</pre>
	<imageiirl> \image\p2 ipg<!--</th--></imageiirl>
	ImageUrl> <navigateurl>www.Excel.com</navigateurl>
	<alternativetext>Excel<!--</th--></alternativetext>
	AlternativeText> <keyword>softdrink</keyword>
	<impression>2</impression>
	<ad></ad>
	<pre><imageurl>.\image\p3.jpg</imageurl><navigateurl>www_7up_com</navigateurl></pre>
	<pre><alternativetext>7up</alternativetext></pre> ///////////////////////////////////
	AlternativeText> <keyword>softdrink</keyword>
	<impression>2</impression>
Self-Instructional	

8 Material

#### </Ad><Ad>

```
<ImageUrl>.\image\p4.jpg</
ImageUrl><NavigateUrl><u>www.Mirinda.com</u></NavigateUrl>
<AlternativeText>Mirinda</
AlternativeText><Keyword>softdrink</Keyword>
<Impression>2</Impression>
```

#### </Ad>

```
</Advertisements>
```

#### **Output:**



#### 7. Write a program to display the holiday in calendar.

```
Partial Class _Default Inherits System.Web.UI.Page Dim
Holidays(13,32)
Protected Sub Page_Load(ByVal sender As Object, ByVal e
As System.EventArgs) Handles Me.Load
Holidays(10, 12) = "Birthdays" Holidays(10, 15) =
"Aniversary"
```

End Sub

```
Protected Sub Calendar1_DayRender(ByVal sender As
Object, ByVal e As
System.Web.UI.WebControls.DayRenderEventArgs) Handles
Calendar1.DayRender If e.Day.IsOtherMonth Then
e.Cell.Controls.Clear()
Else
```

#### Dim adate As Date = e.Day.Date

Dim aHolidays As String = Holidays(adate.Month, adate.Day) If (Not aHolidays Is Nothing) Then

#### NOTES

Self-Instructional Material

VB.NET & RDBMS Lab Dim aLB As New LB() aLB.Text = "<br> "& & AHOLidayse.Cell.Controls.Add(aLB)

NOTES

End If End If End Sub End Class

#### Output:

Co to the greatous	month	N	ovember 2009	9		D
Sun	Mon	lue	Wed	Thu	Fri	Sat
25	26	27.	28	29	30	<u>31</u>
4	2	3	4	5	ē	4
8	9	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	14
.15	<u>16</u>	<u>17</u>	18	<u>19</u>	<u>20</u>	21
22	23	24	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>
<u>29</u>	<u>30</u>	1	2	3	4	

#### 8. Write a program to display the vacation in calendar.

Partial Class \_Default InheritsSystem.Web.UI.Page

Protected Sub Calendar1\_DayRender(ByVal sender As Object, ByVal e As System.Web.UI.WebControls.DayRenderEventArgs) Handles Calendar1.DayRender

Dim vocationstyle As New Style() With vocationstyle
.BackColor =System.Drawing.Color.Yellow
.BorderColor =System.Drawing.Color.Black
.BorderWidth = New Unit(3) End With
Dim weekendstyle As New Style()
weekendstyle.BackColor =
System.Drawing.Color.SpringGreen
If ((e.Day.Date>= New Date(2009, 11, 23)) And
(e.Day.Date<= New Date(2009, 11, 30)))
Then</pre>

```
VB.NET & RDBMS Lab
```

```
e.Cell.ApplyStyle(vocationstyle) ElseIf
(e.Day.IsWeekend) Then e.Cell.ApplyStyle(weekendstyle)
End If
```

End Sub

#### **Output:**

Oct Go to the previous	month	N	ovember 200	9		<u>Dec</u>
Sun	Mon	Tue	Wed	Thu	Fri	Sat
<u>25</u>	26	<u>27</u>	<u>28</u>	<u>29</u>	30	<u>31</u>
4	2	3	4	5	<u>6</u>	
4	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	14
	<u>16</u>	<u>17</u>	18	<u>19</u>	<u>20</u>	-21
24	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	28
<u>29</u>	30	1	2	3	4	lice -

NOTES

#### 9. Write a program to display the selected date in the calendar.

Partial Class \_Default Inherits System.Web.UI.Page Dim Holidays(13,32)

```
Protected Sub Calendar3_DayRender(ByVal sender As
Object, ByVal e As
System.Web.UI.WebControls.DayRenderEventArgs) Handles
Calendar3.DayRender
```

```
Dim vacationstyle As New Style() With vacationstyle
.BackColor = System.Drawing.Color.Yellow
.BorderColor = System.Drawing.Color.Purple
.BorderWidth = New Unit(3) End With
Dim weekendstyle As New Style()
```

```
weekendstyle.BackColor = System.Drawing.Color.Green
If ((e.Day.Date>= Calendar1.SelectedDate) And
(e.Day.Date<= Calendar2.SelectedDate))
Then
e.Cell.ApplyStyle(vacationstyle) ElseIf
(e.Day.IsWeekend) Then e.Cell.ApplyStyle(weekendstyle)
End If
If a Day IsOtherMenth Then a Cell Centrele Clear() Else</pre>
```

```
If e.Day.IsOtherMonth Then e.Cell.Controls.Clear() Else
Dim aDate As Date = e.Day.Date
```

VB.NET & RDBMS Lab	Dim aHolidays As String = Holidays(aDate.Month, aDate.Day) If (Not aHolidays Is Nothing) Then	
	Dim aLB As LB = New LB() aLB.Text = `` " &aHolidayse.Cell.Controls.Add(aLB)	
NOTES	End If End If EndSub	
	Protected Sub Page_Load(ByVal sender As Object, ByVale As System.EventArgs) Handles Me.Load	è
	Holidays(8, 15) = "IndependenceDay" Holidays(1, 26) = "RepublicDay" Holidays(10, 12) = "Birthday"	
	End Sub	
	Protected Sub Calendar1_SelectionChanged(ByVal sender As Object, ByVal e As System.EventArgs) Handles Calendar1.SelectionChanged	
	LB1.Text = Calendar1.SelectedDate End Sub	
	Protected Sub Calendar2_SelectionChanged(ByVal sender As Object, ByVal e As System.EventArgs) Handles Calendar2.SelectionChanged	
	LB2.Text = Calendar2.SelectedDate End Sub	
	End Class	
	Output:	
	$\leq$ April 2010 $\geq$ $\leq$ April 2010	2
	Sun Mon Tue Wed Thu Fri         Sat         Sun Mon Tue Wed Thu Fri           28         29         30         31         1         2         3         28         29         30         31         1         2	Sat 3
	<u>4</u> <u>5</u> <u>6</u> <u>7</u> <u>8</u> <u>9</u> <u>10</u> <u>4</u> <u>5</u> <u>6</u> <u>7</u> <u>8</u> <u>9</u>	<u>10</u>
	11         12         13         14         15         16         17         11         12         13         14         15         16           18         19         20         21         22         23         24         18         19         20         21         22         23	$\frac{17}{24}$
	25     26     27     28     29     30     1     25     26     27     28     29     30       2     3     4     5     6     7     8     2     3     4     5     6     7	1 8

FROM TO 4/6/2010

FROM TO 4/12/2010

≤ Ap			pril 20	10		2
Sun	Mon	Tue	Wed	Thu 1	Fri 2	Sat
¥	5	<u>6</u>	1	<u>8</u>	9	10
<u>11</u>	12	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	h
18	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	4
	26	27	28	29	<u>30</u>	

#### 10. Implement a program that display the difference between two dates.

User can select two dates by DateTimePicker and also calculate number of days. For this, take a window form, two labels, two DateTimePicker and a Button. Then, set the properties of these controls as:

Label: Set its name as Start Date and End Date by its Text Property.

DateTimePicker: Set its Format Property as Short.

**Button:** Set its name as Calculate by its Text Property. Then, Form will look as shown below:

Calculate Days		
Start Date	8/23/2011	
End Date	8/23/2011	
	Calculate	

After that, write the following code on double click of Calculate button.

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#### NOTES

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Then, Select two dates and click Calculate button, The output will look like as shown below:

NOTES

Start Date	<mark>6/ 7/2011</mark> ₪ <del>-</del>	
End Date	6/18/2011 🗐 🗸	Total Days are 11
		ОК
	Calculate	

If user enter wrong data, means if End Date comes before Start Date, then error message will show as "Invalid Input".

Calculate Days		
Start Date	8/23/2011	
End Date	8/ 1/2011	
	Calculate	Invalid Input
		ОК

#### 11. Write a program to perform Treeview operation using data list.

Partial Class \_Default InheritsSystem.Web.UI.Page Protected Sub Button1\_Click(ByVal sender As Object, ByVal e As System.EventArgs) Handles Button1.Click

```
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```

```
Dim checkednodes As TreeNodeCollection =
TreeView1.CheckedNodes DataList1.DataSource =
checkednodes
DataList1.DataBind()
```

#### NOTES

End Sub

#### **Output:**

Art & science	
BA	
MA	
🗉 🗐 Science & Humanity	
Bsc	
Msc	
E Computer science	
CSE	
BCA	
MCA	
	Fixit
	1.04.16

#### 12. Write a program to perform Treeview operation.

Partial Class \_Default InheritsSystem.Web.UI.Page Protected Sub Page\_Load(ByVal sender As Object, ByVale As System.EventArgs) Handles Me.Load EndSub

Protected Sub TreeView1\_SelectedNodeChanged(ByVal sender As Object, ByVal e As System.EventArgs) Handles TreeView1.SelectedNodeChanged

Dim value As String = TreeView1.SelectedNode.Value Dim
path As String = TreeView1.SelectedNode.ValuePath
Response.Write("The value select was" & value & "<br>")
Response.Write("The value path is " & value & "<br>")
End Sub

Protected Sub TreeView1\_TreeNodeCheckChanged(ByVal sender As Object, ByVale As System.Web.UI.WebControls.TreeNodeEventArgs) Handles TreeView1.TreeNodeCheckChanged

Dim value As String =e.Node.Value

```
Response.Write("The value collapsed was" & value &
"<br>") End Sub
```

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```
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                          Protected Sub TreeView1 TreeNodeExpanded(ByVal sender
                          As Object, ByVal e As
                          System.Web.UI.WebControls.TreeNodeEventArgs) Handles
                          TreeView1.TreeNodeExpanded Dim value As String =
                          e.Node.Value
      NOTES
                          Response.Write ("The value collapsed was" & value &
                          "<br>") End Sub
                          End Class
                       Output:
                                   The value collapsed wasSRM UNIVERSITY
                                   The value collapsed wasArt & science
                                                                         ■ SRM UNIVERSITY
                                                                          🗉 🗌 Art & science
                                                                              BA
                                                                              MA
                                                                           🗉 🔲 Science & Humanity
                                                                          🕀 🗐 Computer science
                       13. Write a program to perform validation operation.
                          Protected Sub Button1 Click (ByVal sender As Object, ByVal
                          e As System.EventArgs)
                          Handles Button1.Click
                          If IsValid Then LB9.Enabled = False
                           TBox7.Enabled = False
                          End If
                       Output:
                                                         Registation form
                                           Name
                                                                 Rajeev Ranjan
                                           Reg_no
                                                                 35208095
                                           Date_Of_Birth
                                                                 05-08-1986
                                           Department
                                                                 MCA
                                                                 CHENNAL
                                           Address
                                           Phone number
                                           personal phone no
                                                                9962941836
                                           Home phone no
                                                                9962941836
                                                                Rajeevj38@gmail.com
                                            Email_id
                                                             Register
     Self-Instructional
16
     Material
```

**Note:** ActiveX Controls exist as separate files. Earlier versions of Visual Basic called VBX's (Visual Basic Extensions) and later OCX's .ocx extensions. One may include these controls by adding them to Toolbox. Microsoft includes many ActiveX controls that may enhance the performance of application.

#### 14. Write a program to demonstrate intrinsic controls and ActiveX controls.

To use the control in a Visual Studio project, it must first be added to the Tool Box. Select "Choose Toolbox Items..." from the Tools drop down menu or by right clicking on the Tool Box itself.

#### Create Form in design view:



Choose the "Choose Toolbox Items" as shown below:

TOC	DLS	TEST	WINDOW	HELP	
@ <sup>®</sup>	Att	ach to Pro	ocess		Ctrl+Alt+P
**	Cor	nnect to D	atabase		
\$	Cod	de Snippe	ts Manager		Ctrl+K, Ctrl+B
	Cho	oose Tool	box Items		
¢	Ext	ensions a	nd Updates		
	Cre	ate GUID	i.		
	Erre	or Lookup			
	Ext	ernal Too	ls		
	Imp	oort and E	xport Setting	s	
	Cus	stomize			
Ø	Opt	tions			

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#### NOTES

The Choose Toolbox Items dialogue box has four tabs. Select COM Components tab as shown in screenshot given below. After that click on box for csXImage. The trial version is shown below:

NOTES

	Name	Path	Library	Last Modified	
	ButtonBar Class	C:\Program Files (x86)\Microsoft Offi	UmOutlookAddi	14/02/2013	
	Cdlg.RepCdg	C:\PROGRA~2\COMMON~1\MICROS	Cdlg	23/06/1998	
		C:\Windows\SysWOW64\CFX32.OCX C:\Windows\System32\wiaaut.dll	Microsoft Windo	10/06/1996	
	Contact Selector	C:\Program Files (x86)\Microsoft Offi		14/02/2013	
	CoverEdCtrl Control	C:\PROGRA~2\Vero\VERO7~1\VER	Canada Canaina O	11/12/2006	
	csXGraph Control	C:\Program Files (x86) (MyHeritage (pl C:\PROGRA~2\CHESTY~1\csXGraph\	csXGraph Library	06/12/2011	
	csXGraphTrial Control	C:\PROGRA~2\CHESTY~1\CSXGRA~	csXGraphTrial Li	06/12/2013	
	csXImage Control	C:\PROGRA~2\CHESTY~1\csXImage C:\PROGRA~2\CHESTY~1\CSXIMA~	csXImage Library	13/11/2013 28/05/2014	
	csXMultiUpload Control	C:\PROGRA~2\CHESTY~1\CSXMUL~	csXMultiUpload	12/04/2012	
	csXPostUpload Control	C:\PROGRA~2\CHESTY~1\CSXPOS~	csXPostUpload L	28/07/2011	
	csXThumbUpload Control	C:\PROGRA~2\CHESTY~1\CSXTHU~	csXThumbUploa	08/07/2013	
	CsXThumbUploadTrial Control	C:\PROGRA~2\CHESTY~1\CSXTHU~	csXThumbUploa	18/05/2013	
	csXImageTrial Control	itral		Brows	se
	Version: 5.0				
			ОК	Cancel F	Reset
A	fter clicking on OF	K button, the control wi	ill appear i	in the Toc	ol Box a
n he a	dded to a form like	e any other control			
		e any other control.			
	51 📰 Ia	ableLayoutPanel		11.11	
	abil Te	vtBox			
		EXILION			
	🖲 Tir	mer			
	🕑 Tir 💷 To	mer polStrip			
	() Tir 1000 To 1000 To	mer polStrip polStripContainer			
	() Tir 1000 To 101 To 101 To	mer polStrip polStripContainer polTip			
	() Tir () To () To () To () Tr	mer polStrip polStripContainer polTip ackBar			
	() Tir ™ To ™ To ™ To Tr Tr Tr	mer oolStrip oolStripContainer oolTip ackBar eeView			
	() Tir ™ To ™ To ™ To ™ To ™ Tr ₩ Tr ₩ VS	mer polStrip polStripContainer polTip ackBar eeView ScrollBar			
	() Tir □ To 1 T	mer polStrip polStripContainer polTip ackBar eeView ScrollBar ebBrowser			
	<ul> <li>⑦ Tir</li> <li>□ To</li> <li>1 To&lt;</li></ul>	mer polStrip polStripContainer polTip ackBar eeView GcrollBar ebBrowser			
	Ŭ Tir Imi To Imi To Imi To Imi To Imi To Imi To Imi To Imi VS Imi VS Imi VS Imi VS Imi VS	mer polStrip polStripContainer polTip ackBar eeView GcrollBar ebBrowser XImageTrial Control			
	Ŭ Tir I To I To I To I To I To I To I To I To	mer polStrip polStripContainer polTip ackBar eeView GcrollBar ebBrowser XImageTrial Control Controls			
	<ul> <li>Trine</li> <li>To</li> <li>To<td>mer polStrip polStripContainer polTip ackBar eeView ScrollBar ebBrowser XImageTrial Control Controls ers</td><td></td><td></td><td></td></li></ul>	mer polStrip polStripContainer polTip ackBar eeView ScrollBar ebBrowser XImageTrial Control Controls ers			
	<ul> <li>Trine</li> <li>Trine</li> <li>Trine</li> <li>Trine</li> <li>Trine</li> <li>Trine</li> <li>Trine</li> <li>Trine</li> <li>VS</li> <li>S</li> <li>Common</li> <li>Containee</li> </ul>	mer polStrip polStripContainer polTip ackBar eeView ScrollBar ebBrowser XImageTrial Control Controls ers			
А	() Tir □ To □ So □ So	mer polStrip polStripContainer polTip ackBar eeView ScrollBar ebBrowser XImageTrial Control Controls ers can import a csXImag	se control	and a but	tton and
A	<ul> <li>♥ Tir</li> <li>♥ To</li> <li>♥ To&lt;</li></ul>	mer polStrip polStripContainer polTip ackBar eeView ScrollBar ebBrowser XImageTrial Control Controls ers can import a csXImag utton click event handle	ge control	and a but	tton and
A e follo	() Time To To To To To To To To To To	mer polStrip polStripContainer polTip ackBar eeView ScrollBar ebBrowser XImageTrial Control Controls ers can import a csXImage utton click event handle	ge control er:	and a but	tton and
A e follo Priv Ever	<ul> <li>♥ Tim</li> <li>♥ To</li> <li>♥ To&lt;</li></ul>	mer polStrip colStripContainer polTip ackBar eeView GorollBar ebBrowser XImageTrial Control Controls ers can import a csXImag utton click event handle ofClick (sender A s Button 1 Click	ge control er: s Object	and a bur	tton and
A e follo Priv Ever	♦ Tim To To To To To To To To	mer polStrip polStripContainer polTip ackBar eeView ScrollBar ebBrowser XImageTrial Control Controls ers can import a csXImage utton click event handle n1_Click (sender A s Button1.Click	ge control er: s Object	and a but	tton and
A e follo Priv Ever Ax	() Time To To To To To To To To To To	mer polStrip polStripContainer polTip ackBar eeView ScrollBar ebBrowser XImageTrial Control Controls ers can import a csXImage utton click event handle pl_Click (sender A s Button1.Click dDialog()	ge control er: s Object	and a bur	tton and
A e follo Priv Ever Ax End	() Time To To To To To To To To To To	mer polStrip polStripContainer polTip ackBar eeView ScrollBar ebBrowser XImageTrial Control Controls ers can import a csXImage utton click event handle pl_Click (sender A s Button1.Click dDialog()	ge control er: s Object	and a bur	tton and

The default name for a csXImage object when it is placed on a form is *AxImageBox1*. This can be changed in the properties box at the right hand side of the IDE. This code calls the LoadDialog command which allows the user to select and load an image from disk.

#### **MDI CONTROLS**

In Multiple Document Interface (MDI) application, we can view and work with several documents at the same time, similar to Microsoft Excel or word. MDI applications have a feature of MDI child forms and its very essential element of it.

#### 15. Write a program to demonstrate an application with multiple forms.

Parent and Child Forms in MDI

MDI applications consist of a main form, which does not display any data itself, and one or more child forms which appear only within the main form are used for displaying documents. The main form is called the *MDI parent*, and the child forms are called the *MDI children*. The Form class has two properties that control whether a given form is an MDI parent, MDI child, or neither.

Note: The MdiParent property (which is of type Form) controls whether a form behaves as an MDI child.

```
MDI application an example program:
Imports System
Imports System.Windows.Forms
Public Module AppModule
  Public Sub Main( )
Application.Run(New MainForm( ))
   End Sub
End Module
Public Class MainForm
  Inherits Form
  Public Sub New( )
     Text = "My MDI Application"
'MDI parent form
     IsMdiContainer = True
'Child form
    Dim myChild As New DocumentForm ("My Document", Me)
     myChild.Show
   End Sub
```

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#### NOTES

```
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```

```
End Class
```

Public Class DocumentForm

```
NOTES
```

Inherits Form
Public Sub New(ByVal name As String, ByVal parent As
Form)
 Text = name
 MdiParent = parent
 End Sub

End Class

Save the code in in a file named MyApp.vb, it can be compiled from the command line with this command:

```
vbc MyApp.vb /r:System.dll,System.Windows.Forms.dll
```

#### **Output:**



#### **Data Controls**

The controls on the form can't see the database directly. They see the database through the Data control. The Data control in turn sees a RecordSet which happens to be a table of the database. You'll learn later how to specify other types of RecordSets for the Data control. As a relationship among the TextBox and other controls on the Form, the Data control, and the database is used.

A database consists of various tables, consider the following tables:

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StudentAndSubjects StudentInfo SubjectInfo SubjectStartDate SubjectCompleted SubjectEndDate	CourseInfo CourseID CourseName
Students and Courses Studentilo Surname FullNames CourseName SubjectName SubjectStartDate SubjectEndDate	StudentTnfo StudentNo. FileNo TimeSlot Class StartDate FulNames Surname Course Monthly NoPayments CourseID StuRecNum
SubjectInfo PK CourseID SubjectName StartDate EndDate	

#### NOTES

#### 16. Write a program to demonstrate data controls using multiple interconnected tables.

Visual Basic 2012 Toolbox provide the following data controls as shown below:

▲ Data	
k	Pointer
赐	Chart
e"	BindingNavigator
<b>1</b>	BindingSource
Ċ.	DataGridView
<b>1</b>	DataSet

**Step 1:** Create the database.

Microsoft Access or SQL Server or other database can be used to create database. Following are the steps to create database using MS Access.

1. Open Microsoft Access.

NOTES

#### 2. In the Available Templates, select Blank database, as shown below:



3. On the right side of the screen enter the File name, in this case: Students.accdb, then click Create, as shown below:

Students.acc	db	b	5							
C:\Users\Har	ines	ne	es	;Tł	he	Gre	at\	Do	cun	nen

4. Inside the new Screen, edit the columns and data as shown below:

	StudentNumber -	StuydentName	•	StudentSurname	
	1	Hannes		du Preez	
	2	YourName		YourSurname	
*	(New)				

5. Save the table as StudentInfo.

#### **VB.NET Project**

After creating database, next phase is to create a new VB.NET Windows Forms Project in VB.NET.

#### Connecting to an MS Access 2010 Database using the Data Controls

To connect to your Database, follow the steps given :

- 1. Click on the DataGridView on your Form.
- 2. A small right pointing triangle will appear.

3. Click on it. This will give you a screen similar as given below:

4. Click on the drop down arrow next to Choose Data Source. This will produce a screen that resembles as given below:

DataGridView Tasks	
Choose Data Source:	StudentInfoBindingSo 💌
Edit Columns	
Add Column	
Enable Adding	
Enable Editing	
Enable Deleting	
🖉 Enable Column Re	ordering
Dock in Parent Contai	ner

NOTES

5. Click on Add Project Data Source. The Wizard will open as shown below:

None StudentInfoBindingSource	
Other Data Sources	
*	
Add Project Data Source	
Select a BindingSource to bind to.	

6. Make sure Database is selected, then click Next.

6	oose a Dat	a Source T	VDe			
-11-		5 D O O				
Untere will the Database	e application 100 Service	get data from Di Cityect	m?			
Lets you conv	ect to a datab	tese and choo	ose the databas	e objects for you	application.	

NOTES

7. Make sure Dataset is selected, then click on Next.

Bataset	Entity Data Model	you want to use?		
The databas be added to	r model you choose d your project.	letermines the types of a	lata objects your applica	tion code uses. A dataset file w

8. Click on New Connection.

"Change" to ch	oose a different data source and	d/or provider.
Data <u>s</u> ource:		
Microsoft Acc	ess Database File (OLE DB)	Change
Database file na	ame:	
Í.		Browse
Log on to the <u>U</u> ser name:	database Admin	
<u>P</u> assword:	Save my password	
		Advanced

9. Click on Browse next to Database name, and select your Students.accdb database, as shown below:

change to choose a unreferit data so	urce and/or provider.
Data <u>s</u> ource:	
Microsoft Access Database File (OLE D	B) <u>C</u> hange
Database file name:	
C:\Users\HannesTheGreat\Documents	Student: Browse
Log on to the database	
User name: Admin	
Password:	
Save my password	
	Ad <u>v</u> anced



10. Click OK

- 11. Select Tables. Give the ConnectionString a name such as StudentAccessDataSet.
- 12. Click Finish.
- 13. The following controls will appear inside your design window.



You will now see that your **DataGridView** shows the three columns of table. The DataGridView is now connected to your database. We still need to connect our Textboxes as well as the BindingNavigator to the database.

#### **Connecting the TextBoxes to Access Database**

Follow the steps given below:

- 1. Select a TextBox and open the Properties Window.
- 2. Expand the DataBindings property (at the top of the list).
- 3. Select Text.
- 4. Select the appropriate Field you want to connect to from the displayed combobox, as shown below:



#### Try Yourself:

- (i) Develop an application to demonstrate MDI form for student registration.
- (ii) Develop an application to demonstrate use of data control.

#### NOTES

17. Write a program to demonstrate application with common dialogs.

NOTES



#### 18. Write a program to demonstrate application with common dialogs.

There are many built-in dialog boxes to be used in Windows forms for various tasks like opening and saving files, printing a page, providing choices for colors, fonts, page setup, etc., to the user of an application. These built-in dialog boxes reduce the developer's time and workload.



The ColorDialog control class represents a common dialog box that displays available colors along with controls that enable the user to define custom colors. It lets the user select a color.





Develop an application to change the forecolor of a label control using the color dialog box.

Solution:

- Create a font and Drag and drop a label control, a button control and a ColorDialog control on the form.
- Set the Text property of the label and the button control to 'Give me a new Color' and 'Change Color', respectively.
- Change the font of the label as per your likings.
- Double-click the Change Color button and modify the code of the Click event.

PrivateSubButton1\_Click(sender AsObject, e
AsEventArgs)HandlesButton1.Click
IfColorDialog1.ShowDialog<>Windows.Forms.DialogResult.CancelThen
Label1.ForeColor=ColorDialog1.Color
EndIf
EndSub

When the application is compiled and run using Start button available at the Microsoft Visual Studio tool bar, it will show the following window:

#### **Output:**

Give me a new color
Change Color

#### 19. Write the steps to demonstrate Application with Menus.

In VB .NET MainMenu is the container for the Menu structure of the form. Menus are made of MenuItem objects that represent individual parts of a menu (like File->New, Open, Save, Save As etc). It is MenuItem's click event that makes Menus Event of the MenuItem.

#### **Creating Menus**

Drag a MainMenu component from the toolbar onto the form. When you add a MaiuMenu component to the form, it appears in the component tray below the form.

NOTES

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NOTES

Windows form designer will add the MenuItem's for this by default, you need not add this. Once when you finish adding a MainMenu component to the form you will notice a "TypeHere" box towards the top-left corner of the form.

To create a menu all you have to do is click on the "TypeHere" text which opens up a small textbox allowing you to enter text for the menu.

You can use the arrow keys on the keyboard to create a submenu or add other items to that menu or click on the first menu item and use the left/right arrow keys on the keyboard to create a new menu item as shown below:

	_ [ ] ]
le Edit Type Here Type Here	

MainMenu:

20. Write the steps to demonstrate how to open and save files using menus. Design a form using menus - Create submenus to open and save files using open and save dialog boxes.

Steps to create windows application:

- Select File->New-> Project. Visual studio will display the new project dialog box.
- In the new project dialog box, click the windows Application icon. In the name field, type a project name that describes the program you are binding, such as Demo program.
- Click ok button, you will get a design window where you can drag and drop controls onto form.
- To display the toolbox that contains the control you can drag and drop on to your form, select View->Toolbox which will open Toolbox window.
- In the toolbox window, drag and drop menu control Create submenus like copy, paste, undo Create submenus like new, open, save, save as etc.
- Drag and drop opendialogbox and savedialogbox on to the form.
- Write the code to open the dialogbox and save the respected form using various methods.
- Select Debug menu and then start to run the program.

#### **Output:**

**NOTES** 

#### -Form1 \_ 🗆 🗙 File Edit View Project 2 🗙 Open Look in: 🗀 mm 🕑 🗿 🗊 🗁 🗔 • My Recent Documents Desktop 3 My Documents My Computer Local Disk (C:) My Recent Documents Local Disk (C.) Local Disk (D.) DVD Drive (F.) DVD Drive (F.) My Documents My Network Places New Folder mm Desktop B oupu My Documents My Computer Open File name: OpenFileDialog1 4 Files of type: Cancel My Network [qmd,"]qem#d ~ Save File As 👻 0 🖸 🖻 🖽 -Save in: 🔁 Window bin My Project 🔂 obj Desktop Projects -My Computer Object name: Window Y Save Save as type. UTF-8 Project File (".vbproj) Y Cancel

#### Try Yourself:

- (i) Develop an application to design menus including File, Edit, and Help.
- (ii) Develop an application to demonstrate sub-menu.

VB.NET & RDBMS Lab	21. Write a program to demonstrate Drag and Drop operation.
NOTES	Let us look at some examples, starting with simple drag and drop operation. Create a Visual Basic.net windows application and design a form with control & Drag Drop event procedure as follows:
	To enable drag & drop for text, follow the steps.
	1. Place two <b>textboxes</b> and set <b>Allowdrop</b> property of a second <b>textbox</b> to
	true.
	2. Add the following code
	Private MouseIsDown As Boolean = False `variable declaration
	Private Sub TextBox1_MouseDown(ByVal sender As Object, ByVal e As _
	System.Windows.Forms.MouseEventArgs) Handles TextBox1.MouseDown
	'Set a flag to show that the mouse is down.
	MouseIsDown = True
	End Sub
	Private Sub TextBox1_MouseMove(ByVal sender As Object, ByVal e As _
	System.Windows.Forms.MouseEventArgs) Handles TextBox1.MouseMove
	If MouseIsDown Then
	'Initiate dragging.
	TextBox1.DoDragDrop(TextBox1.Text,DragDropEffects.Copy)
	End If
	MouseIsDown = False
	End Sub
	Private Sub TextBox2_DragEnter(ByVal sender As Object, ByVal e As _
	System.Windows.Forms.DragEventArgs) Handles TextBox2.DragEnter
	'Check the format of the data being dropped.
	If (e.Data.GetDataPresent(DataFormats.Text)) Then
	'Display the copy cursor.
	e.Effect = DragDropEffects.Copy
	Else
	'Display the no-drop cursor.
	e.Effect = DragDropEffects.None
	End If
	End Sub
Self Instance 1	

```
Private Sub TextBox2_DragDrop(ByVal sender As Object,
ByVal e As _
System.Windows.Forms.DragEventArgs) Handles
TextBox2.DragDrop
'Paste the text.
TextBox2.Text = e.Data.GetData(DataFormats.Text)
End Sub
```

In the above code, the **MouseDown** event is used to set a flag showing that the mouse is down, and then the **DoDragDrop** method is called in the **MouseMove** event. Although you could initiate the drag in the **MouseDown** event, doing so would create undesirable behavior: Every time a user clicks the control, the no-drag cursor would be displayed.

The **DoDragDrop** method takes two parameters:

- Data parameter, which in this case takes the Text property of the TextBox
- allowedEffects parameter, which in this case only allows copying

Also in the **MouseMove** event the **MouseIsDown** flag is set to **False**. Although unnecessary in this example, if you had multiple controls that support dragging, you could get a run-time exception.

In the **DragEnter** event, the **GetDataPresent** method checks the format of the data being dragged. In this case it is text, so the **Effect** property is set to **Copy**, which in turn displays the copy cursor.

In the **DragDrop** event, the **GetData** method is used to retrieve the text from the **DataObject** and assign it to the target **TextBox**.

The next section provides an example of dragging a different type of data and providing support for both cutting and copying.

To enable drag and drop for a picture:

1. Add two picturebox control to a form

2. Add the following code.

```
Private Sub Form1_Load(ByVal sender As System.Object,
ByVal e As _
System.EventArgs) Handles MyBase.Load
`Enable dropping.
PictureBox2.AllowDrop = True
End Sub
Private Sub PictureBox1_MouseDown(ByVal sender As Object,
ByVal e As _
System.Windows.Forms.MouseEventArgs) Handles
PictureBox1.MouseDown
If Not PictureBox1.Image Is Nothing Then
`Set a flag to show that the mouse is down.
```

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#### NOTES

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VB.NET & RDBMS Lab	m_MouseIsDown = True
	End If
	End Sub
NOTES	Private Sub PictureBox1_MouseMove(ByVal sender As Object, ByVal e As _
	System.Windows.Forms.MouseEventArgs) Handles PictureBox1.MouseMove
	If m_MouseIsDown Then
	'Initiate dragging and allow either copy or move.
	<pre>PictureBox1.DoDragDrop(PictureBox1.Image, DragDropEffects.Copy Or _</pre>
	DragDropEffects.Move)
	End If
	m_MouseIsDown = False
	End Sub
	Private Sub PictureBox2_DragEnter(ByVal sender As Object, ByVal e As _
	System.Windows.Forms.DragEventArgs) Handles PictureBox2.DragEnter
	If e.Data.GetDataPresent(DataFormats.Bitmap) Then
	'Check for the CTRL key.
	If e.KeyState = 9 Then
	e.Effect = DragDropEffects.Copy
	Else
	e.Effect = DragDropEffects.Move
	End If
	Else
	e.Effect = DragDropEffects.None
	End if
	End sub
	Private Sub PictureBox2_DragDrop(ByVal sender As Object, ByVal e As _
	System.Windows.Forms.DragEventArgs) Handles PictureBox2.DragDrop
	'Assign the image to the PictureBox.
	<pre>PictureBox2.Image = e.Data.GetData(DataFormats.Bitmap)</pre>
	'If the CTRL key is not pressed, delete the source picture.
	If Not e.KeyState = 8 Then
	PictureBox1.Image = Nothing
	End If
	End Sub

In the above code, note that the **AllowDrop** property for the second **PictureBox** control is set in the **Form1\_Load** event. This is necessary because the **AllowDrop** property is not available at design time.

In the **MouseDown** event, the code first checks to make sure that there is an image assigned to the **PictureBox**; otherwise, after you moved the picture, subsequent clicks would raise an exception.

Also note that in both the **DragEnter** and **DragDrop** events the code checks to see if the CTRL key is pressed to determine whether to copy or move the picture. Why are the values different? In the **DragEnter** event, the left mouse button is down, resulting in a value of 8 for the CTRL key plus 1 for the left mouse button.

Both examples, so far have dealt with dragging between two controls on the same form; they would also work for dragging items between controls on different forms within an application. The next example demonstrates accepting items dropped from another application — in this case, files that are dragged from Windows Explorer.

#### **Output:**

🖓 Drag and Drop	
Dragging a Text	
Target	
Simple Drag Drop control	
Dragging a Picture	

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#### NOTES

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🚽 Drag and Drop	
Dragging a Text	
Simple Drag Drop control	
Simple Drag Drop control	
Dragging a Picture	

Applications need to respond to events when they occur. There are mainly two types of events **Mouse events and Keyboard events**.

Mouse Events:

- MouseDown "it occurs when a mouse button is pressed
- MouseEnter "it occurs when the mouse pointer enters the control
- MouseHover "it occurs when the mouse pointer hovers over the control
- MouseLeave "it occurs when the mouse pointer leaves the control
- MouseMove "it occurs when the mouse pointer moves over the control
- MouseUp " it occurs when the mouse pointer is over the control and the mouse button is released
- **MouseWheel** " it occurs when the mouse wheel moves and the control has focus

#### **Try Yourself:**

- (i) Develop an application to demonstrate MouseMove and MouseUp events.
- (ii) Develop an application to demonstrate Drag and Drop Events.

#### 22. Write a program to demonstrate the use of mouse events.

Apply the following steps:

- (i) Create a new form.
- (ii) Add three labels, three text boxes and a button control in the form.
- (iii) Change the text properties of the labels to Customer ID, Name and Address, respectively.
- (iv) Change the name properties of the text boxes to txtID, txtName and txtAddress, respectively.

```
(v) Change the text property of the button to 'Submit'.
(vi) Add the following code in the code editor window:
PublicClassForm1
PrivateSubForm1 Load(sender AsObject, e
AsEventArgs) HandlesMyBase.Load
 ' Set the caption bar text of the form.
     Me.Text = "tutorialspont.com"
   End Sub
   Private Sub txtID MouseEnter(sender As Object, e As
EventArgs)
     Handles txtID.MouseEnter
      'codefor handling mouse enter on ID textbox
     txtID.BackColor=Color.CornflowerBlue
     txtID.ForeColor=Color.White
EndSub
PrivateSub txtID MouseLeave(sender AsObject, e
AsEventArgs)
Handles txtID.MouseLeave
 'code for handling mouse leave on ID textbox
     txtID.BackColor = Color.White
     txtID.ForeColor = Color.Blue
   End Sub
   Private Sub txtName MouseEnter(sender As Object, e
As EventArgs)
     Handles txtName.MouseEnter
      'codefor handling mouse enter on Name textbox
     txtName.BackColor=Color.CornflowerBlue
     txtName.ForeColor=Color.White
EndSub
PrivateSub txtName MouseLeave (sender AsObject, e
AsEventArgs)
Handles txtName.MouseLeave
 'code for handling mouse leave on Name textbox
     txtName.BackColor = Color.White
      txtName.ForeColor = Color.Blue
   End Sub
```

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```
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```

NOTES

```
Private Sub txtAddress MouseEnter(sender As Object,
e As EventArgs)
    Handles txtAddress.MouseEnter
     'codefor handling mouse enter on Address textbox
txtAddress.BackColor=Color.CornflowerBlue
    txtAddress.ForeColor=Color.White
EndSub
PrivateSub txtAddress_MouseLeave(sender AsObject, e
AsEventArgs) _
Handles txtAddress.MouseLeave
'code for handling mouse leave on Address textbox
     txtAddress.BackColor = Color.White
     txtAddress.ForeColor = Color.Blue
  End Sub
  Private Sub Button1 Click(sender As Object, e As
EventArgs)
     Handles Button1.Click
MsgBox("Thank you " & txtName.Text & ", for your kind
cooperation")
  End Sub
End Class
```

#### **Output:**

When the above code is executed and run using **Start** button available at the Microsoft Visual Studio tool bar, it will show the following window:

Submit	
	Submit

Customer ID: 12 Name James Bond Address:

Try to enter text in the text boxes and check the mouse events:

#### NOTES

### **Keyboard Events**

Following are the various keyboard events related with a Control class -

- KeyDown occurs when a key is pressed down and the control has focus
- KeyPress occurs when a key is pressed and the control has focus
- KeyUp occurs when a key is released while the control has focus

The event handlers of the KeyDown and KeyUp events get an argument of type **KeyEventArgs**. This object has the following properties –

- Handled indicates if the KeyPress event is handled
- KeyChar stores the character corresponding to the key pressed

#### 23. Write a program to demonstrate the use of keyboard events.

#### Solution:

Let us continue with the previous example to show how to handle keyboard events. The code will verify that the user enters some numbers for his customer ID and age.

- (i) Create a new form
- (ii) Add a label with text Property as 'Age' and add a corresponding text box named txtAge.
- (iii) Add the following codes for handling the KeyUP events of the text box txtID.

PrivateSub txtID\_KeyUP(sender AsObject, e AsKeyEventArgs)

```
Handles txtID.KeyUp
```

If(NotChar.IsNumber(ChrW(e.KeyCode)))Then

MessageBox.Show("Enter numbers for your Customer ID")
 txtID.Text=" "

```
EndIf
EndSub
```

### (iv) Add the following codes for handling the KeyUP events of the text box txtID.

PrivateSub txtAge\_KeyUP(sender AsObject, e AsKeyEventArgs)

#### NOTES

Handles txtAge.KeyUp

If(NotChar.IsNumber(ChrW(e.keyCode)))Then MessageBox.Show("Enter numbers for age") txtAge.Text=" " EndIf EndSub

#### **Output:**

When the above code is executed and run using Start button available at the Microsoft Visual Studio tool bar, it will show the following window:

Customer ID:	1	
Name		
Address:		
Age		
	Submit	

If you leave the text for age or ID as blank or enter some non-numeric data, it gives a warning message box and clears the respective text:

Customer ID:	12	
Name	James Bond	
Address:	California, US	
Age	1n	
		Enter numbers for age
	Submit	



#### 24. Write an ADO.NET code to show records in DataGridView Control.

**DataGridView** provides a visual interface to data. It is an excellent way to display and allow editing for your data. It is accessed with VB.NET code. Data edited in the DataGridView can then be persisted in the database.

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# 25. Write a program to demonstrate the concept DataGridView control. Solution:

First, you should add a DataGridView control to your Windows Forms application by double-clicking on the control name in the Visual Studio designer panel. After you add the control, you can add the Load event on the form.

**Load:** You can create the Load event on the Form's event pane in Visual Studio. We use Load in this example. Here, We use an empty DataTable on the DataGridView control. We assign the DataSource property.

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This event handler is executed when the program starts up and when the DataGridView control is displayed. The Form1\_Load sub calls into the GetDataTable function, which would return a DataTable from your database in SQL Server.

Assigning the DataSource property on DataGridView copies no data. It allows the DataGridView to read in the DataTable and display all its contents on the screen in grid form. This is an efficient way to populate DataGridView.

#### DataTable

When using the DataGridView control in Windows Forms, you should use the lightning bolt panel. This allows you to manipulate the events on the control. DataGridView has many events, and this article doesn't describe them all. However, you will often want the CellClick, SelectionChanged, CellDoubleClick, and KeyPress events, depending on your requirements.

#### Objects

You can use an object collection, such as a List (Of String), in your DataGridView using the Visual Basic language. The object collection will be read. Its properties (get accessors) will be used to display the values on the screen.

#### List

This is the easiest way to get started with DataGridView. But it may be less effective than more complex approaches.

```
Public Class Test
   Public Sub New (ByVal name As String, ByVal cost As
String)
       _name = name
       cost = cost
   End Sub
   Private _name As String
   Public Property Name() As String
       Get
           Return name
       End Get
Set(ByVal value As String)
           _name = value
       End Set
   End Property
   Private _cost As String
   Public Property Cost() As String
       Get
```

```
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```

NOTES

```
Return _cost
End Get
Set(ByVal value As String)
_cost = value
End Set
End Property
```

End Class

#### 26. Write a program that uses DataGridView with class.

Public Class Form1

Private Sub Form1\_Load(ByVal sender As System.Object,

ByVal e As System.EventArgs)

```
Handles MyBase.Load
Dim list = New List(Of Test)
list.Add(New Test("Mac", 2200))
list.Add(New Test("PC", 1100))
DataGridView1.DataSource = list
End Sub
End Class
```

This program includes the Public Class Test definition, which encapsulates two properties with backing stores. The names of these properties are Name and Cost. These could be used for an inventory of merchandise.

After the Dim List is allocated, two new Test objects are added to its contents. These two objects are reflected in the DataGridView output to the screen. You can see the four cells from the four values in the example in the screenshot.

You can hide the row headers, which are the boxes on the left of the DataGridView control, from appearing on the screen. The screenshot shows what the row headers look like on DataGridView controls.

#### 27. Write a program that adds rows in database.

```
Public Class Form1
```

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We can obtain the location of the current cell in VB.NET code. One way you can do this is add the SelectionChanged event. As a reminder, you can add events easily in Visual Studio by using the lightning bolt panel.

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**Next**, in the DataGridView1\_SelectionChanged event, you can access the DataGridView1.CurrentCellAddress property. This is a System.Drawing.Point type that has two instance properties, X and Y.

#### 28. Write a program that gets current record.

```
Public Class Form1
     Private Sub Form1 Load (ByVal sender As
  System.Object, _
                            ByVal e As System. EventArgs)
  Handles MyBase.Load
  Dim list = New List(Of Test)
  list.Add(New Test("Mac", 2200))
  list.Add(New Test("PC", 1100))
         DataGridView1.DataSource = list
      End Sub
     Private Sub DataGridView1 SelectionChanged(ByVal
  sender As System.Object,
                                                  ByVal e
  As System.EventArgs)
                                                  Handles
  DataGridView1.SelectionChanged
  Dim y As Integer = DataGridView1.CurrentCellAddress.Y
          Dim x As Integer =
  DataGridView1.CurrentCellAddress.X
  'Write coordinates to console.
  Console.WriteLine(y.ToString + " " + x.ToString)
      End Sub
  End Class
29. Write a program to bind data in a multiline TBox by querying in
another TBox.
  Imports System.Data
  Imports System.Data.SqlClient
  Partial Class Default InheritsSystem.Web.UI.Page
```

Dim constr As String =

ConfigurationManager.ConnectionStrings ("DatabaseConnectionString1").Connection VB.NET & RDBMS Lab String

Protected Sub Button\_Click(ByVal sender As Object, ByVal e As System.EventArgs) Handles Button1.Click Dim conPubs As SqlConnection Dim cmdSelect As

SqlCommand Dim dtrResults As SqlDataReader Dim intField As Integer conpubs = New SqlConnection(constr)

```
conPubs.Open()
cmdSelect = New SqlCommand(txtQuery.Text, conPubs)
dtrResults = cmdSelect.ExecuteReader()
txtResults.Text="""
```

While dtrResults.Read() txtResults.Text&=vbNewLine For intField = 0 To dtrResults.FieldCount - 1

```
txtResults.Text&=
dtrResults(intField).ToString().PadRight(15) Next
End While dtrResults.Close() conPubs.Close()
```

End Sub

End Class

#### **Output:**

Encourc	addy	
1	Beverages	Soft drinks, coffees, teas, beers, and alesSystem.
2	Condiments	Sweet and savory sauces, relishes, spreads, and se
3	Confections	Desserts, candles, and sweet breadsSystem.Byte[]
4	Dairy Products	Cheeses System.Byte[]
5	Grains/Cereals	Breads, crackers, pasta, and cerealSystem.Byte[]
6	Meat/Foultry	Prepared meats System.Byte[]
7	Produce	Dried fruit and bean curdSystem.Byte[]
8	Seafood	Seaweed and fishSystem.Byte[]
		V
<		Sector Se

**30.** Write a program to display the phone number of an author from database.

```
Imports System.Data.SqlClient Partial Class _Default
Inherits System.Web.UI.Page Dim constr As String =
ConfigurationManager.ConnectionStrings
("DatabaseConnectionString1").Connection String
```

```
Protected Sub Button1_Click(ByVal sender As Object,
ByVal e AsSystem.EventArgs) Handles Button1.Click
```

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VB.NET & RDBMS Lab	Dim conpubs As SqlConnection Dim strselect AsString
	Dim cmdselect As SqlCommand
	conpubs = NewSqlConnection(constr)
NOTES	strselect = "select phone from Author
	<pre>cmdselect = New SqlCommand(strselect,</pre>
	cmdselect.Parameters.Add("@Au_fname",
	<pre>cmdselect.Parameters.Add("@Au_lname",</pre>
	<pre>conpubs.Open()label5.Text = cmdselect.ExecuteScalar() conpubs.Close() End SubEnd Class</pre>
	Output:
	Another PhoneLookup
	Au_fname
	Rajeev
	Au_Iname
	Ranjan
	lookup
	phone 456987
	31. Write a program showing data bind using dropdown list.
	Imports System Data SolClient Partial Class Default
	Inherits System. Web.UI. Page Dim constr As String=
	ConfigurationManager.ConnectionStrings ("DatabaseConnectionString1").Connection String Protected Sub Button1_Click(ByVal sender As Object, ByVal e As System.EventArgs) Handles Button1.Click
	LB1.Text = "you pick" & ComboBox1.SelectedValue EndSub
	Protected Sub Page_Load(ByVal sender As Object, ByVale As System.EventArgs) Handles Me.Load
	Protected Sub Page_Load(ByVal sender As Object, ByVale As System.EventArgs) Handles Me.Load If Not IsPostBack Then
	Protected Sub Page_Load(ByVal sender As Object, ByVale As System.EventArgs) Handles Me.Load If Not IsPostBack Then Dim conpubs As SqlConnection Dim cmdselect As SqlCommand Dim dtrAuthor AsSqlDataReader
	Protected Sub Page_Load(ByVal sender As Object, ByVale As System.EventArgs) Handles Me.Load If Not IsPostBack Then Dim conpubs As SqlConnection Dim cmdselect As SqlCommand Dim dtrAuthor AsSqlDataReader conpubs = New SqlConnection(constr)
	<pre>Protected Sub Page_Load (ByVal sender As Object, ByVale As System.EventArgs) Handles Me.Load If Not IsPostBack Then Dim conpubs As SqlConnection Dim cmdselect As SqlCommand Dim dtrAuthor AsSqlDataReader conpubs = New SqlConnection (constr) cmdselect = New SqlCommand ("select Au_fname from Author", conpubs) conpubs.Open()</pre>
	<pre>Protected Sub Page_Load(ByVal sender As Object, ByVale As System.EventArgs) Handles Me.Load If Not IsPostBack Then Dim conpubs As SqlConnection Dim cmdselect As SqlCommand Dim dtrAuthor AsSqlDataReader conpubs = New SqlConnection(constr) cmdselect = New SqlCommand("select Au_fname from Author", conpubs) conpubs.Open() dtrAuthor = cmdselect.ExecuteReader()</pre>
	<pre>Protected Sub Page_Load(ByVal sender As Object, ByVale As System.EventArgs) Handles Me.Load If Not IsPostBack Then Dim conpubs As SqlConnection Dim cmdselect As SqlCommand Dim dtrAuthor AsSqlDataReader conpubs = New SqlConnection(constr) cmdselect = New SqlConmand("select Au_fname from Author", conpubs) conpubs.Open() dtrAuthor = cmdselect.ExecuteReader() ComboBox1.DataSource = dtrAuthor</pre>

ComboBox1.DataTextField = "Au_fname"	VB.NET & RDBMS Lab
ComboBox1.DataBind() dtrAuthor.Close() conpubs.Close()	
End If	
End Sub	NOTES
EndClass	NOTES
Output:	
Seymour 👻 Button	
von pick	
Seymour	
32. Write a program to insert the data into database using Execute-Non	
Ouerv.	
Imports System.Data.SglClient Partial Class Default	
Inherits System.Web.UI.Page Dim constr As String=	
ConfigurationManager.ConnectionStrings	
("DatabaseConnectionString1").Connection String	
Protected Sub Button1_Click(ByVal sender As Object,	
Dim conpute As SalConnection Dim strinsort As String	
Dim conjubs As SqlConmection Dim Stillisert As Stillig Dim cmdInsert As SqlCommand	
conpubs = New SqlConnection(constr)	
strInsert = "Insert	
Author(Au_fname,Au_lname)values(@Au_fname,@Au_lname)"	
<pre>cmdInsert = New SqlCommand(strInsert, conpubs) amdInsert Darameters Add("ADu frame", tutframe "mout)</pre>	
cmdInsert.Parameters.Add("@Au_Iname", txtIname.Text)	
conpubs.Open() cmdInsert.ExecuteNonQuery()	
conpubs.Close()	
Response.Write("New Rowinserted")	
End Sub	
End Class	
Output:	
New row insert	
Au_fname	
Satish	
Au_lname	
Kumar	
Add	
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VB.NE	ET & RDBMS Lab	<b>33.</b> Write a program to delete the data in database using Execute non- query.		
		Imports System.Data.SqlClient Partial Class _Default		
ΝΟΤ	NOTES	Inherits System.Web.UI.Page Dim constr As String=		
	NOTES	ConfigurationManager.ConnectionStrings ("RajeevConnectionString1").ConnectionSt ring Protected Sub Button1_Click(ByVal sender As Object, ByVal e As System.EventArgs) Handles Button1.Click		
		Dim conpubs As SqlConnection Dim strdelete As String Dim cmddelete As SqlCommand		
		conpubs = New SqlConnection(constr)		
		<pre>strdelete = "delete from Author where Au_fname=@Au_fname" cmddelete = New SqlCommand(strdelete, conpubs) cmddelete.Parameters.Add("@Au_fname", TBox1.Text) conpubs.Open()</pre>		
		<pre>cmddelete.ExecuteNonQuery() Response.Write("Row delete") conpubs.Close()</pre>		
		End Sub		
		End Class		
		Output:		
		Row delete		
		Au_fname		
		Rajeev		
		Au_hame		
		Remove		
		34. Write a program for Databinding using datalist control.		
		Imports System.Data.SqlClient		
	Partial Class _Default Inherits System.Web.UI.P constr As String=			
		ConfigurationManager.ConnectionStrings("DatabaseConnectionString1").Connection String Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load		
		Dim conpubs As SqlConnection Dim cmdselect As SqlCommand Dim dtrAuthor As		
		SqlDataReader		
46	Self-Instructional Material	conpubs = New SqlConnection(constr)		

```
cmdselect = New SqlCommand("Select Au_fname from
Author", conpubs) conpubs.Open() dtrAuthor =
cmdselect.ExecuteReader() dlstAuthor.DataSource =
dtrAuthordlstAuthor.DataBind() dtrAuthor.Close()
conpubs.Close() End Sub
```

End Class

#### **Output:**

Rajeev Rajeev Sonu sanjay

#### 35. Write a program to bind data using template in datalist.

Imports System.Data.SqlClient Partial Class \_Default
Inherits System.Web.UI.Page Dim constr As String =
ConfigurationManager.ConnectionStrings
("DatabaseConnectionString1").Connection String
Protected Sub Page\_Load(ByVal sender As Object, ByVale
As System.EventArgs) Handles Me.Load

Dim conpubs As SqlConnection Dim cmdselect As SqlCommand Dim dtrAuthor As SqlDataReader

conpubs = New SqlConnection(constr)

```
cmdselect = New SqlCommand("Select * from Author",
conpubs) conpubs.Open() dtrAuthor =
cmdselect.ExecuteReader() dtrlstAuthor.DataSource =
dtrAuthordtrlstAuthor.DataBind() dtrAuthor.Close()
```

conpubs.Close()

End Sub

End Class

#### **Output:**

#### Author Phone Number

```
Au_name:Rajeev
Au_lname:Jaiswal
Phone:234567
Au_name:Sonu
Au_lname:kumar
Phone:345234
Au_name:trideep
Au_lname:shariya
Phone:345675
Au_name:Deepak
Au_lname:shariya
Phone:565432
Au_name:Ranjan
Au_lname:jaiswal
Phone:876875
```

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#### NOTES

VB.NET & RDBMS Lab		36. Write a program to bind data using data grid.
		Imports System.Data.SqlClient
	NOTES	Partial Class _Default Inherits System.Web.UI.Page Dim constr As String=
		ConfigurationManager.ConnectionStrings('RajeevConnectionString1").ConnectionSt ring Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.Load
		Dim conpubs As SqlConnection Dim cmdselect As SqlCommand
		conpubs = New SqlConnection(constr)
		<pre>cmdselect = New SqlCommand("select * from Author", conpubs) conpubs.Open()</pre>
		<pre>datagrd.DataSource = cmdselect.ExecuteReader() datagrd.DataBind()</pre>
		conpubs.Close() End Sub
		Protected Sub datagrd SelectedIndexChanged(BvVal sender
		As Object, ByVal e As System.EventArgs) Handles datagrd.SelectedIndexChanged
		End Sub
		End Class
		Output:
		Rajeev Ranjan
		Ranjan Jaiswal
		Somi jaiswal Trideen Sharma
		Deepak Shariya
		27 Weite a new mean to bird data using the works as being data and
		57. Write a program to bind data using template column in data grid.
		Imports System.Data.SqlClient Partial Class _Default
		Inherits System.Web.UI.Page Dim constr As String =
		ConfigurationManager.ConnectionStrings
		("DAtabaseconnectionStringi").connection String Protected Sub Page Load (ByVal sender As Object, ByVal e
		As System.EventArgs) Handles Me.Load
		Dim conpubs As SqlConnection Dim cmdselect As SqlCommandconpubs = New SqlConnection(constr)
		<pre>cmdselect = New SqlCommand("select * from Author",</pre>
		<pre>conpubs) conpubs.Open() datagrd.DataSource = cmdselect.ExecuteReader() datagrd.DataBind()</pre>
		conpubs.Close()
		End Sub
		End Class
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**Output:** 

```
Rajeev phone: 565434
       city: chennai
       phone: 676545
Ranjan
        city: chapra
Trideep phone: 676546
       city: Guwahati
       phone: 565678
sonu
        city: chapra
```

#### NOTES

#### 38. Write a program to bind data using hyperlink column in data grid.

```
Imports System.Data.SqlClient Partial Class Default
  Inherits System.Web.UI.Page
  Dim constr As String =
  ConfigurationManager.ConnectionStrings
  ("DatabaseConnectionString1").Connection String
  Protected Sub Page Load (ByVal sender As Object, ByVal e
  As System. EventArgs) Handles Me. Load
  Dim conpubs As SqlConnection Dim cmdselect As
  SqlCommand
  conpubs = New SqlConnection(constr)
  cmdselect = New SqlCommand("select * from Author",
  conpubs)
  conpubs.Open()
  datagrdlnk.DataSource = cmdselect.ExecuteReader()
  datagrdlnk.DataBind()
  conpubs.Close()
  End Sub
  End Class
Output:
                              ADC
                             asp
                             Vb
39. Write a program to bind data using button column in data grid.
```

Imports System.Data.SqlClient Partial Class Default Inherits System.Web.UI.Page Dim constr As String = ConfigurationManager.ConnectionStrings ("DatabaseConnectionString1").Connection String

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```
VB.NET & RDBMS Lab
                     Protected Sub Page Load (ByVal sender As Object, ByVale
                    As System.EventArgs) Handles Me.Load
                     If Not IsPostBack Then
                     Dim conpubs As SqlConnection Dim cmdselect As
     NOTES
                     SqlCommandconpubs = New SqlConnection(constr)
                     cmdselect = New SqlCommand("select * from Author",
                     conpubs) conpubs.Open() GridView1.DataSource =
                     cmdselect.ExecuteReader() GridView1.DataBind()
                     conpubs.Close() End If
                    End Sub
                    Protected Sub GridView1 RowCommand (ByVal sender As
                    Object, ByVal e As
                    System.Web.UI.WebControls.GridViewCommandEventArgs)
                    Handles GridView1.RowCommand
                    If e.CommandName = "select" Then
                    GridView1.SelectedRowStyle.BackColor =
                    Drawing.Color.Green
                    Else
                    GridView1.SelectedRowStyle.BackColor =
                    Drawing.Color.White End If
                    End Sub
                    End Class
                  40. Write a program to create link using event in data list.
                     Imports System.Data.SqlClient Partial Class Default
                     Inherits System.Web.UI.Page Dim constr As String =
                    ConfigurationManager.ConnectionStrings
                     ("RajeevConnectionString1").ConnectionSt ring Protected
                    Sub Page Load (ByVal sender As Object, ByVal e As
                    System.EventArgs) Handles Me.Load
                     If Not IsPostBack Then
                    Dim conpubs As SqlConnection
                    Dim cmdselect As SqlCommand
                    Dim dtrAuthor As SqlDataReaderconpubs = New
                    SqlConnection(constr)
                    cmdselect = New SqlCommand("Select * from Author",
                    conpubs) conpubs.Open()
                    dtrAuthor = cmdselect.ExecuteReader()
                    dtrlstAuthor.DataSource =
                    dtrAuthordtrlstAuthor.DataBind() dtrAuthor.Close()
                     conpubs.Close()
                     End If
                    End Sub
                    Protected Sub dtrlstAuthor_CancelCommand(ByVal source
                    As Object, ByVal e As
                     System.Web.UI.WebControls.DataListCommandEventArgs)
```

VB.NET & RDBMS Lab Handles dtrlstAuthor.CancelCommand lb1Message.Text = " Cancel Item!" End Sub Protected Sub dtrlstAuthor DeleteCommand(ByVal source As Object, ByVal e As System.Web.UI.WebControls.DataListCommandEventArgs) NOTES Handles dtrlstAuthor.DeleteCommand lb1Message.Text = " Delete Item!" End Sub Protected Sub dtrlstAuthor EditCommand (ByVal source As Object, ByVal e As System.Web.UI.WebControls.DataListCommandEventArgs) Handles dtrlstAuthor.EditCommand lb1Message.Text &= " Edit item!" End Sub Protected Sub dtrlstAuthor ItemCommand (ByVal source As Object, ByVal e As System.Web.UI.WebControls.DataListCommandEventArgs) Handles dtrlstAuthor.ItemCommand lb1Message.Text = " Item command!" End Sub Protected Sub dtrlstAuthor UpdateCommand(ByVal source As Object, ByVal e As System.Web.UI.WebControls.DataListCommandEventArgs) Handles dtrlstAuthor.UpdateCommand lb1Message.Text = "Update Item!" End Sub End Class **Output:**  Item command! · Edit item! Rajeev Ranjan Sonu Edit Delete Update Cancel Item Edit Delete Update Cancel Item Edit Delete Update Cancel Item Trideep Edit Delete Update Cancel Item 41. Write a program to implement paging concept data grid and dataset. Imports System.Data Imports System.Data.SqlClient Partial Class Default Inherits System.Web.UI.Page Dim constr As String = ConfigurationManager.ConnectionStrings ("DatabaseConnectionString1").Connection String Protected Sub Page Load (ByVal sender As Object, ByVale As System. EventArgs) Handles Me. Load If Not IsPostBack Then Binddatagrid() End If End Sub Sub Binddatagrid() Self-Instructional Material

VB.NET & RDBMS Lab	Dim conpubs As SqlConnection Dim dtrProgram Title As SqlDataAdapter Dim datset As DataSetconpubs = New SqlConnection(constr)
NOTES	<pre>dtrProgram Title = New SqlDataAdapter("select * from Author", conpubs) datset = New DataSetdtrProgramTitle.Fill(datset) GridView1.DataSource = datset GridView1.DataBind()</pre>
	End Sub
	Protected Sub GridView1_PageIndexChanged(ByVal sender As Object, ByVal e As System.EventArgs) Handles GridView1.PageIndexChanged
	End Sub
	Protected Sub GridView1_PageIndexChanging(ByVal sender As Object, ByVal e As System.Web.UI.WebControls.GridViewPageEventArgs)
	CridView1 PageIndex = o NewPageIndexPinddatagrid()
	End Sub
	Protected Sub GridView1_SelectedIndexChanged(ByVal sender As Object, ByVal e As System.EventArgs) Handles GridView1.SelectedIndexChanged
	End Sub
	End Class
	Output:
	Au_id Au_fname Au_lname phone01RajeevRanjan45323402RanjanJaiswal5654561 2 3
	After click on second page
	Au_id Au_fname Au_lname phone 03 Sonu Kumar 565467
	04 Trideep sarma 565456
	123
	42. Write a program to create an own table and bind data using data grid. Imports System.Data Partial Class _Default
	Inherits System.Web.UI.Page
	Function CreateDatasource() As ICollection Dim dt As New DataTable()
	Dim dr As DataRow

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\_

```
dt.Columns.Add (New DataColumn ("integervalue",
GetType(Int32))) dt.Columns.Add(New
DataColumn("stringvalue", GetType(String)))
dt.Columns.Add (New DataColumn ("currencyvalue",
GetType(Double))) Dim i As Integer
For i = 0 To 8
dr = dt.NewRow() dr(0) = i
dr(1) = "item" + i.ToStringdr(2) = 1.23 * (i + 1)
dt.Rows.Add(dr) Next i
Dim dv As New DataView(dt) Return dv End Function
Protected Sub Page Load (ByVal sender As Object, ByVal e
As System. EventArgs) Handles Me. Load
If Not IsPostBack Then GridView1.DataSource =
CreateDatasource() GridView1.DataBind()
End If
End Sub
End Class
```

#### **Output:**

integer	value stringva	lue currencyvalue
0	item0	1.23
1	item1	2.46
2	item2	3.69
3	item3	4.92
4	item4	6.15
5	item5	7.38
6	item6	8.61
7	item7	9.84
8	item8	11.07

#### Try Yourself:

- (i) Develop an application to display student details in form.
- (ii) Develop an application to demonstrate bind data using data grid control to display student details in form.

# 43. Write a program to demonstrate select operation using ADO.Net Code.

We will work with the sample Emp table in Oracle.

#### **Retrieving Records:**

Imports System.Data.OleDB
Public Class Form1 Inherits System.Windows.Forms.Form
Dim myConnection As OleDbConnection
Dim myCommand As OleDbCommand
Dim dr As New OleDbDataReader()

VB.NET & RDBMS Lab

#### NOTES

```
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                     Private Sub Form1 Load (ByVal sender As System.Object,
                     ByVal e As
                      System.EventArgs)
                     Handles MyBase.Load
     NOTES
                     myConnection = New OleDbConnection
                      ("Provider=MSDAORA.1;UserID=scott;password=tiger;
                     database=ora")
                      'MSDORA is the provider when working with Oracle
                     Try
                     myConnection.Open()
                      'opening the connection
                     myCommand = New OleDbCommand("Select * from emp",
                     myConnection)
                     'executing the command and assigning it to connection
                     dr = myCommand.ExecuteReader()
                     While dr.Read()
                      'reading from the datareader
                     MessageBox.Show("EmpNo" & dr(0))
                     MessageBox.Show("EName" & dr(1))
                     MessageBox.Show("Job" & dr(2))
                     MessageBox.Show("Mgr" & dr(3))
                     MessageBox.Show("HireDate" & dr(4))
                     'displaying data from the table
                     End While
                     dr.Close()
                     myConnection.Close()
                     Catch e As Exception
                     End Try
                     End Sub
                     End Class
                   The above code displays first 5 columns from the Emp table in Oracle.
                   44. Write a program to demonstrate insert operation using ADO.Net Code.
                   Drag a Button from the toolbox onto the Form. When this Button is clicked the
                   values specified in code will be inserted into the Emp table.
                     Imports System.Data.OleDb
                     Public Class Form2 Inherits System.Windows.Forms.Form
                     Dim myConnection As OleDbConnection
                     Dim myCommand As OleDbCommand
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```

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```
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  Dim ra as Integer
   'integer holds the number of records inserted
  Private Sub Form2 Load (ByVal sender As System.Object,
  ByVal e As_
                                                                    NOTES
  System.EventArgs) Handles MyBase.Load
  End Sub
  Private Sub Button1 Click (ByVal sender As
  System.Object, ByVal e As
  System.EventArgs) Handles Button1.Click
  myConnection = New
  OleDbConnection (""Provider=MSDAORA.1;User
  ID=scott;password=tiger;database=ora")
  Try
  myConnection.Open() myCommand = New
  OleDbCommand ("Insert into emp values
  12, 'Ben', 'Salesman', 300, 12-10-2001, 3000, 500, 10 ",
  myConnection)
  'emp table has 8 columns. You can work only with the
  columns you want ra=myCommand.ExecuteNonQuery()
  MessageBox.Show("Records Inserted" & ra)
  myConnection.Close()
  Catch
  End Try
  End Sub
  End Class
45. Write a program to demonstrate delete operation using ADO.Net
Code.
Drag a Button on a new form and paste the following code.
  Imports System.Data.OleDb
  Public Class Form3 Inherits System.Windows.Forms.Form
  Dim myConnection As OleDbConnection
  Dim myCommand As OleDbCommand
  Dim ra as Integer
  Private Sub Form3_Load(ByVal sender As System.Object,
  ByVal e As_
  System.EventArgs) Handles MyBase.Load
```

End Sub

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```
VB.NET & RDBMS Lab
                     Private Sub Button1 Click (ByVal sender As
                     System.Object, ByVal e
                     As System.EventArgs) Handles Button1.Click
     NOTES
                     Try
                   Try yourself:
                     (i) Develop an application to display student details in for using ADO control.
                   46. Write a program to demonstrate update operation using ADO.Net
                   Code.
                   Drag a Button on a new form and paste the following code.
                      Imports System.Data.OleDb
                     Public Class Form4 Inherits System.Windows.Forms.Form
                     Dim myConnection As OleDbConnection
                     Dim myCommand As OleDbCommand
                     Dim ra as Integer
                     Private Sub Form4 Load (ByVal sender As System.Object,
                     ByVal e As System. EventArgs) Handles MyBase. Load
                      End Sub
                     Private Sub Button1 Click (ByVal sender As
                     System.Object, ByVal e As System.EventArgs) Handles
                     Button1.Click
                     Try
                     myConnection = New
                     OleDbConnection (""Provider=MSDAORA.1;User
                     ID=scott;password=tiger;database=ora")
                     myConnection.Open()
                      myCommand = New OleDbCommand("Update emp Set DeptNo=65
                     where DeptNo=793410", _ myConnection)
                     ra=myCommand.ExecuteNonQuery()
                      MessageBox.Show("Records Updated" & ra)
                     myConnection.Close()
                     Catch
                     End Try
                     End Sub
                     End Class
```

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#### **Crystal Reports**

You can create a Crystal Report using three methods:

- 1. Manually i.e. from a blank document
- 2. Using Standard Report Expert
- 3. From an existing report Using Pull Method Creating Crystal Reports Manually.

We would use the following steps to implement Crystal Reports using the Pull Model:

- 1. Create the .rpt file (from scratch) and set the necessary database connections using the Crystal Report Designer interface.
- 2. Place a CrystalReportViewer control from the toolbox on the .aspx page and set its properties to point to the .rpt file that we created in the previous step.

#### 47. Write the steps for creating a Crystal Reports.

Following are the steps to create the report i.e. the .rpt file.

1. Add a new Crystal Report to the web form by right clicking on the "Solution Explorer", selecting "Add" → "Add New Item" → "CrystalReport".

ategories:	Templates:		81 11
🕢 🔄 Web Project Items	Code File	Dynamic Discovery File	Static Discovery File
	Giobal Applicat	Web Configurati	Text File
	Installer Clas	s Crystal Report	Bitmap File
A Crystal Report file that publish	es data to a Windows or Web form	¢	-
Inte: CrystaReport1.rot			

NOTES

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NOTES

2. On the "Crystal Report Gallery" pop up, select the "As a Blank Report" radio button and click "ok".

As a Blank Hepo     Fom an Existing	nt Report
Choose an Expert	
Form Letter Form Cross-Tap	
Mail Label	
Curdes the creation of a typic	al report.

3. This should open up the Report File in the Crystal Report Designer.

Field Explorer P x	Start Page Reporting sign CrystalReportLapt	11.8	di.
U Database Fields		141 1 - 12	×
[7] Parameter Tields	Report Header (Sentent )		ā
Group Name Fields 2 Running Tutal Fields 3 E Special Fields 2 University Earth	Page Header (Sector 2)		
			1 20 m
	person (second )		and a
	Report Factor (Section 1)		â
	Para Factor Rantacht		9
			Souther of
			manuth
An On Day			
		- in 1	

4. Right click on the "Details Section" of the report, and select "Database" → "Add/Remove Database".

- 5. In the "Database Expert" pop up window, expand the "OLE DB (ADO)"option by clicking the "+" sign, which should bring up another "OLE DB (ADO)" pop up.
- 6. In the "OLE DB (ADO)" pop up, Select "Microsoft OLE DB Provider for SQL Server" and click Next.
- 7. Specify the connection information.
- 8. Click "Next" and then click "Finish".
- 9. Now you should be able to see the Database Expert showing the table that have been selected.
- 10. Expand the "Pubs" database, expand the "Tables", select the "Stores" table and click on ">" to include it into the "Selected Tables" section.

ote: to create an alias for an a	dded table, click	its name and edit it.)	
alable Data Sources:		Selected Tables:	
Project Data     OLE DB (ADO)     Make New Connect     Make New Connect     Make New Connect     Make Add Command     MomePCWetSDK     Make Source     Ma	tion	HomePCWetSDK	

- 11. Now the Field Explorer should show you the selected table and its fields under the "Database Fields" section, in the left window.
- 12. Drag and drop the required fields into the "Details" section of the report. The field names would automatically appear in the "Page Header" section of the report. If you want to modify the header text then right click on the text of the "Page Header" section, select "Edit Text Object" option and edit it.

#### NOTES

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#### 13. Save it.



#### Try Yourself:

(i) Generate a crystal report to display students data.

#### Getting Started with SQL

To work with SQL\*Plus Oracle (in our case) should to be installed on computer system. The following steps are required to follow to invoke SQL plus:

- 1. Click on Start button
- 2. Point on All Programs

NOTES

#### 3. Point on Oracle Database 10g Express Edition



The following Screen given below will appear:

**Note:** Oracle user name and password may be different and need to be verified in lab. In this manual User name is Demo and Password in Demo.

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1. Enter the User Name Demo, password Demo (Consult to your Lab Instructor for user name and password)

2. Click on "Login" button.

ORACLE Database Express Edition

#### NOTES

Database Login	Links
Enter your database username and password. Username Password	<ul> <li>License Agreement</li> <li>Documentation</li> <li>Forum Registration</li> <li>Discussion Forum</li> <li>Product Page</li> </ul>
Login	

Enter the User name and Password as created during installation. The following screen will appear. In this screen, click on **SQL**.

	abase Express Editio	n		
User: KAVITA				
Home				
$\square$				
9.42	- N - I			
Administration	Object Browser	SQL	Utilities	Application Builder

After clicking on SQL following screen will appear. Click on **SQL Command** to go to SQL command window.

ORACLE' Database Express Edition

Enter SQL statement or PL/SQL command and click Run to see the results.

User: KAVITA		
Home > <mark>SQL</mark>		
50L*	-	-
SQL Commands	SQL Scripts	Query Builder

After clicking on **SQL Command** following command screen will appear, where we can type and run all SQL commands.

Autocommit Display 10 •	Save Ru

# SQL Queries: *Data Definition Language (DDL)* Creating a Table

Autocommit Display 10 🔻	
eate Table Course ( C_code <u>varchar</u> (15), C_name <u>varchar</u> (15), Duration humber (8), Fee number (10,2) );	
sults Explain Describe Saved SQL History	
aming Tables	
Home > SQL > SQL Commands	
Autocommit Display 10 V	Save Run
Results Explain Describe Saved SQL History	
Statement processed.  pping a table Use: KAVITA	
✓ Autocommit Display 10 ▼ Trop table Course;	Save Run

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Table dropped.

NOTES

# **Table description**

Home > SQL > SQL Commands

## NOTES

1000	minin Disp	ay 10	•					Sa	ave
escribe	Course								
Results	Explain Des	cribe Saved	SQL His	forv					
Results Dbject Typ	Explain Des	cribe Saved	SQL His SE	tory					
Results Object Typ Table	Explain Des De TABLE C Column	cribe Saved Diject COUR Data Type	SQL His SE Length	tory Precision	Scale	Primary Key	Nullable	Default	Commen
Results Object Typ Table COURSE	Explain Des De TABLE C Column <u>C. CODE</u>	cribe Saved Object COUR Data Type Varchar2	SQL His SE Length 15	tory Precision	Scale	Primary Key	Nullable	Default -	Commen -
Results Object Typ Table COURSE	Explain Des De TABLE C Column <u>C CODE</u> <u>C NAME</u>	cribe Saved Object COUR Data Type Varchar2 Varchar2	SQL His SE Length 15 15	Precision -	Scale -	Primary Key	Nullable	Default -	Commen -
Results Dbject Typ Table COURSE	Explain Des De TABLE C Column C.CODE C.NAME DURATION	bject COUR Data Type Varchar2 Varchar2 Number	SQL His SE Length 15 15	Precision - - 8	Scale - - 0	Primary Key	Nullable	Default - -	Commen - -
Results Dbject Typ Table COURSE	Explain Des De TABLE C Column C CODE C NAME DURATION FEE	bject COUR Data Type Varchar2 Varchar2 Number Number	SQL His SE Length 15 15 -	Precision - - 8 10	Scale - D 2	Primary Key - -	Nullable	Default - -	Commen - -

# Modifying table

Add a New Column:

CALCEC Database Express Edition	
User: KAVITA	Harrie Logodi Halp
Iome > SQL > SQL Commands	
Autocommit Display 10 🔻	Save
Alter table student add (mobile Number (10)) ;	

The above command will add a new column mobile in student table. You could see the new structure of student table as shown below:

VB.NET & RDBMS Lab

NOTES

	mmit Disp	lay 10	•					Sa	ive	Run
esc stud	lent;									
Results E	Explain Des	cribe Saved	SQL Hist	tory						
)bject Type	e TABLE O	bject STUDI	ENT							-
Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comme	nt
STUDENT	ROLL NO	Varchar2	10		-	-	~			_
	ADDRESS	Varchar2	20	-			×,			_
	ADDITE33	Varchar2		-	-	-	×,			
			_ <u>R</u>							
	MOBILE	Varcharz Number	8	- 10	0		~	-		_
hangi	MOBILE	Number	f an ex	10 xisting d	colum	- - 111	~			
hangi DRAC	MOBILE	Number Number Number Oj tabase Exp	f <i>an es</i> ress Edit	tion	colum	- - 111	~	- - - -	- 1-5	4 1 H
hangi ORAC User: KAVITA ome > SQL	MOBILE MOBILE ng data LE Da	Number A type of tabase Exp	f an es	tion	colun	- - 111	~	- - - 	- 1-5	a at He
hangi DRAC	MOBILE mg data CLE Da SQL Com mmit Disp	Number A type oj tabase Exp mands Jay 10	s f an es ress Edit	tion	colum	- - 111	~	- - - - -	- 1-5 oms Logo	n H
User KAVITA ORAC User KAVITA tome > SQL Autoco Alten tab	MOBILE MOBILE ng data CLE Da SQL Com mmit Disp ple course	Number A type oj tabase Exp mands lay 10 modify c_c	<sup>8</sup> f an ex ress Edit ▼	- 10 xisting ( tion	colum	- - 111		- - - - - - - - 	- 1-5	a He

The above command will change the data type of c\_code field from varchar to char.

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Autocommit Display 10 V	Save	Rur
Alter table student modify (name <u>varchar</u> (20), ad	dress <u>Varchar</u> (40));	
Results Explain Describe Saved SQL History		

The above command will change the length of name column from 15 to 20 and address from 35 to 40.

After altering student table structure will look like:

Autocor	mmit Disp	lay 10	•						Save	R
lesc stud	ent									
Results E	xplain Des	cribe Saved	SQL Hist	ory						
Results E Dbject Type Table	xplain Des TABLE C Column	cribe Saved bject STUDE Data Type	SQL Hist E <b>NT</b> Length	ory Precision	Scale	Primary Key	Nullable	Default	Comment	
Results E Dbject Type Table STUDENT	xplain Des TABLE C Column ROLL NO	cribe Saved bject STUDE Data Type Varchar2	SQL Hist ENT Length 10	ory Precision	Scale	Primary Key	Nullable	Default	Comment	
Results E Dbject Type Table STUDENT	xplain Des TABLE C Column ROLL NO NAME	cribe Saved bject STUDE Data Type Varchar2 Varchar2	SQL Hist ENT Length 10 20	Precision	Scale -	Primary Key -	Nullable	Default -	Comment -	
Results E Dbject Type Table <u>STUDENT</u>	xplain Des TABLE C Column ROLL NO NAME ADDRESS	cribe Saved bject STUDE Data Type Varchar2 Varchar2 Varchar2	SQL Hist ENT Length 10 20 40	Precision - -	Scale - -	Primary Key	Nullable	Default - -	Comment - -	
Results E Object Type Table STUDENT	xplain Des TABLE C Column ROLL NO NAME ADDRESS C CODE	cribe Saved bject STUDE Data Type Varchar2 Varchar2 Varchar2 Varchar2	SQL Hist ENT Length 10 20 40 8	Precision - - -	Scale - - -	Primary Key	Nullable ✓ ✓ ✓	Default - -	Comment - -	

NOTES

## Deleting any Column

	G	O 7
User: KAVITA	nome	LOGODI HE
Iome > SQL > <mark>SQL Commands</mark>		
Autocommit Display 10 •	Save	e Run
Alter table student drop column mobile;		
Deculte Explain Describe Saved SOL History		
Vesuits Explain Describe Saved SQL History		
able dopped		
abre dropped.		
ata Manipulation Language (DML)		
he data manipulation language statements are INSEI	RT, DELETE, and U	JPDAT
nsert Records in Table		
User: KAVITA		
Iome > SQL > SQL Commands		
Autocommit Display 10 T	Save	Run
✓ Autocommit Display 10 ▼ Insert into course values ('PG001','MCA',3,32000.00	Save	Run
✓ Autocommit Display 10 ▼ Insert into course values ('PG001','MCA',3,32000.00	Save )	Run
✓ Autocommit Display 10 ▼ Insert into course values ('PG001','MCA',3,32000.00	Save )	Run
✓ Autocommit Display 10 ▼ Insert into course values ('PG001','MCA',3,32000.00	)	Run
Autocommit Display 10  Insert into course values ('PG001','MCA',3,32000.00	)	Run
Autocommit Display 10  Insert into course values ('PG001','MCA',3,32000.00 Results Explain Describe Saved SQL History	)	Run
Autocommit Display 10  Insert into course values ('PG001','MCA',3,32000.00 Results Explain Describe Saved SQL History	)	Run
Autocommit Display 10  Insert into course values ('PG001','MCA',3,32000.00 Results Explain Describe Saved SQL History Dutput:	)	Run
Autocommit Display 10  Insert into course values ('PG001', 'MCA', 3, 32000.00 Results Explain Describe Saved SQL History Dutput: Results Explain Describe Saved SQL History	)	Run
Autocommit Display 10  Insert into course values ('PG001','MCA',3,32000.00 Results Explain Describe Saved SQL History Dutput: Results Explain Describe Saved SQL History	)	Run
Autocommit Display 10  Insert into course values ('PG001','MCA',3,32000.00 Results Explain Describe Saved SQL History Dutput: Results Explain Describe Saved SQL History	)	Run
Autocommit Display 10  Insert into course values ('PG001','MCA',3,32000.00 Results Explain Describe Saved SQL History Output: Results Explain Describe Saved SQL History 1 row(s) inserted.	)	Run
Autocommit Display 10  Insert into course values ('PG001','MCA',3,32000.00 Results Explain Describe Saved SQL History Dutput: Results Explain Describe Saved SQL History 1 row(s) inserted.	)	Run
Autocommit Display 10  Insert into course values ('PG001','MCA',3,32000.00 Results Explain Describe Saved SQL History Dutput: Results Explain Describe Saved SQL History 1 row(s) inserted. 0.08 seconds	)	Run
Autocommit Display 10 • Insert into course values ('PG001', 'MCA', 3, 32000.00 Results Explain Describe Saved SQL History )utput: Results Explain Describe Saved SQL History 1 row(s) inserted.	)	Run
Autocommit Display 10 • Insert into course values ('PG001', 'MCA', 3, 32000.00 Results Explain Describe Saved SQL History )utput: Results Explain Describe Saved SQL History 1 row(s) inserted.	)	Run
Autocommit Display 10 • Insert into course values ('PG001', 'MCA', 3, 32000.00 Results Explain Describe Saved SQL History )utput: Results Explain Describe Saved SQL History 1 row(s) inserted. 0.08 seconds	)	Run
Autocommit Display 10  Insert into course values ('PG001','MCA',3,32000.00 Results Explain Describe Saved SQL History Output: Results Explain Describe Saved SQL History 1 row(s) inserted. 0.08 seconds	)	Run

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### Try Yourself:

- 1. Add five records in course table
- 2. Create a new table **Book** with the following fields and data types.

### NOTES

## Field NameData TypeSizeD. Codesupplementation15

B_Code	varchar	15
Title	varchar	30
Author	varchar	15
Price	Number	6,2

- 3. View the structure of Book table.
- 4. Add five records in Book table.

### **Insert Data into Specific Fields**

		Save	Run
insert into student (roll_no, name, address 20','John',' <u>delhi</u> ')	) values ('A-08-		
Results Explain Describe Saved SQL History			
103 coopeda			
US Seconds			
.uo seconds			

#### **Insert Data with User Interaction**

Autocommit	Display 10	•		Save	Run
nsert into co	ourse values	('&C_code', '&C_name',	&duration, &	fee)	

To insert more record the same command could be repeated by putting / and pressing enter key at SQL prompt.



#### Try Yourself:

1. Add the following data into C\_code, C\_name and duration fields of Course table.

C_code	C_name	Duration
UG001	BCA	3
UG002	B Sc-IT	3
PG003	M Sc-IT	2

- 2. Add three 10 records into student table with the user interaction.
- 3. Add data into b\_code, title, and author fields of book table with the user interaction.

**NOTES** 

### **Display Table Records**

### To view all the columns

NOTES

Select *				Save	Rur
	from cours	e			
Results E	Explain Desc	cribe Saved S	SQL History		
Results E	Explain Desc	cribe Saved S	SQL History		
Results E C_CODE PG007	Explain Desc C_NAME M Sc-CS	cribe Saved S DURATION 3	SQL History FEE 32000		
Results E C_CODE PG007 UG001	Explain Desc C_NAME M Sc-CS BCA	Cribe Saved S DURATION 3 3	SQL History FEE 32000 29000		
Results E C_CODE PG007 UG001 UG002	Explain Desc C_NAME M St-CS BCA B SC-IT	DURATION 3 3 3	SQL History FEE 32000 29000 25000		
<b>Results</b> E C_CODE PG007 UG001 UG002 PG002	Explain Desc C_NAME M Sc-CS BCA B SC-IT MBA	DURATION 3 3 2	SQL History FEE 32000 29000 25000 40000		
Results E PG007 UG001 UG002 PG002 PG003	Explain Desc C_NAME M Sc-CS BCA B SC-IT MBA M Sc-IT	DURATION 3 3 2 3	SQL History FEE 32000 29000 25000 40000 32000		

To view selective columns

Autocommit Display 10 •	Save Run
Results Explain Describe Saved SQL History	
Results Explain Describe Saved SQL History	5
Results Explain Describe Saved SQL History C_NAME FEE M Sc-CS 32000	
Results Explain Describe Saved SQL History C_NAME FEE M Sc-CS 32000 BCA 29000	
Results Explain Describe Saved SQL History C_NAME FEE M Sc-CS 32000 BCA 29000 B SC-IT 25000	
Results Explain Describe Saved SQL History C_NAME FEE M Sc-CS 32000 BCA 29000 B SC-IT 25000 MBA 40000	
Results Explain Describe Saved SQL History C_NAME FEE M Sc-CS 32000 BCA 29000 B SC-IT 25000 MBA 40000 M Sc-IT 32000	

### **Update Table Records**

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The Example for Update:

Autocommit Display 10 T	Save Run
Jpdate course set fee=32000 where c_code='	<u>UG001</u> ';
Results Explain Describe Saved SQL History	
row(s) updated.	
).19 seconds	
	Application Express 2.1.0.00.3

The *Example* to update multiple columns:



NOTES

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#### Try Yourself:

- 1. Display name and c\_code of students.
- 2. Change the address from Madras to Delhi of student whose roll number is A-08-20.
- 3. Change the fee from Rs. 32000 to Rs. 38000 of course where c\_code is PG001.

#### Data Control Language (DCL)

Data Control Language are the commands that allow authorized database users to share the data with other users. The shared data could be accessed or manipulated by other users as per the permission granted to those users.

The data manipulation language statements are GRANT and REVOKE

- GRANT- It gives user's access privileges to database.
- **REVOKE**-withdraw user's access privileges given by using the GRANT command.

#### **AGGREGATE FUNCTIONS**

Aggregate functions work on a group of values (a column values) and returns a single value.

Few aggregate functions are listed below:

- SUM()
- MAX()
- MIN()
- AVG()
- COUNT()

Let suppose we have a table Book with the following records.

#### Table: Book

C_CODE	C_NAME	DURATION	FEE
PG002	MBA	2	40000
PG006	MBA	2	50000
PG007	M Sc-CS	3	32000
UG001	BCA	3	32000
UG002	B SC-IT	3	25000
PG003	M Sc-IT	3	32000
PG001	MCA	3	32000

NOTES

### Sum()

To see the sum of fee where the course name is MBA, SQL query is as follows:

Autocommit Display 10 T	Save	Run
Select sum (fee) from course where C_NAME='MBA' ;		
Results Explain Describe Saved SQL History		//
SUM(FEE) 90000		
rows returned in 0.01 seconds <u>CSV Export</u>		

### Min ()



NOTES

#### Max ()

elect max(fee) from course where C_NAME='MBA' ;	
Asults Explain Describe Saved SOL History	
MAX(FEE)	
50000	

### Count (\*)

To see the number of records in the table where course name is MBA, SQL query is as follows:





### LIBRARY INFORMATION SYSTEM

### Book Table for Keeping Track of Books

Field	Data type	Default	Key	Extra
Code	INT(11)	Not Null	Primary	Auto increment
Bookname	VARCHAR(255)	Null		
Author	VARCHAR(255)	Null		
Publication	VARCHAR(255)	Null		
Subject	VARCHAR(255)	Null		
No of copies	INT(10)	Null		

### Student Table for Student Information

Field	Data type	Default	Key	Extra
libid	INT(11)	NOT NULL	Primary key	Auto increment
regno	INT(10)	NULL		
branch	VARCHAR(255)	NULL		
section	VARCHAR(255)	NULL		
semester	VARCHAR(255)	NULL		
section	VARCHAR(2)	NULL		
yearofadm	INT(5)	NULL		

### Teacher Table to Keep Teacher Information

Field	Data Type	Default	Key	Extra
Tid	INT(11)	NOTNULL	Primary key	Auto increment
Name	VARCHAR(255)	NULL		
Designation	VARCHAR(255)	NULL		
Branch	VARCHAR(255)	NULL		
Contactno	INT(13)	NULL		
Lectures	LONG BLOB	NULL		

### Issue Table to Keep Track of Books Issued

Field	Data Type	Default	Key	Extra
bookid	INT(11)	NOT NULL	Foreign key	References book
stuid	INT(11)	NOT NULL	Foreign key	References Student
issuedate	DATE	NULL		
returndate	DATE	NULL		

VB.NET & RDBMS Lab

#### NOTES

### Student Login Table

Field	Data type	Default	Key	Extra
logid	INT(11)	NOT NULL	Foreign key	References Student
Username	VARCHAR(255)	NULL		
Password	VARCHAR(255)	NULL		
numbooks	INT(1)	NULL		

### Event Table for Event Information

Field	Data type	Default	Key	Extra	
Name	Varchar(255)	NULL			
Date	Date(yyyy/mm/dd)	NULL			
Time	VARCHAR(255)	NULL			
Mname	VARCHAR(255)	NULL			
Contactno.	Int(30)	NULL			
Email	VARCHAR(255)	NULL			
Venue	varchar(255)	NULL			

### Teacher Login Table

Field	Data Type	Default	Key	Extra
Loginid	INT(11)	NOTNULL	Foreign key	References teacher
Username	VARCHAR(255)	NULL		
Password	VARCHAR(255)	NULL		

### Student marks sheet processing

### Table Name: Login

Field Name	Data Type	Length	Constraints
Username	Varchar	13	Not null
Password	Varchar	13	Not null

### Table Name: Student

#### VB.NET & RDBMS Lab

Field Name	Data Type	Length	Constraints
Reg_no	Int	11	Primary key
Name	Varchar	20	Not null
Year_of_admission	Varchar	21	Not null
College	Varchar	40	Not null
Regular	Varchar	10	Not null
Course	Varchar	10	Not null
Branch	Varchar	20	Not null

### Table Name: Attendance

Field Name	Data Type	Length	Constraints
Staff_id	Int	11	Primary key, foreign key
Date	Date	10	Primary key, foreign key
attendance	int	10	Not null

### Table Name: Syllabus

Field Name	Data Type	Length	Constraints
Course	Varchar	20	Not null
Branch	Varchar	41	Not null
Semester	Varchar	20	Not null
Year	Varchar	10	Primary key
Code_Subject	Varchar	40	Primary key
Credits	Varchar	40	Not null

### NOTES

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### Table Name: Marks

Field Name	Data Type	Length	Constraints
Rcg_no	int	11	Primary key
Code_Subject	varchar	40	Primary key
Attended_Exam	varchar	10	Not null
Internal_mark	double	10	Not null
First_valuation_mark	double	10	Not null
first_evaluators_id	int	10	Not null
Second_valuation_mark	double	20	Not null
Third_valuation_mark	double	10	Not null
Third_evaluators_id	int	20	Not null
External_mark	double	10	Not null
Final_mark	double	10	Not null
Semester	Varchar	20	Not null
moderation_given	char	3	Not null

### NOTES

Table Name: Camp\_Details

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For entering the details of the second valuation camp. Date\_of\_begin, Branch : Primary key

Field Name	Data Type	Length	Constraints
Staff_name	varchar	30	Not null
Staff_id	Int	11	Foreign key
Informed_not	varchar	10	Not null
Date_of_begin	date	10	Primary key
Subject_to_value	varchar	20	Not null
End_date	Date	10	Not null
Summary	varchar	200	Not null
Branch	varchar	10	Primary key
Semester	varchar	10	Not null
attendance	int	10	Not null

### Table Name: Hall ticket

Field Name	Data Type	Length	Constraints
Reg_no	Int	11	Primary key
Attendence	Double	11	Not null
Fee_paid	Varchar	10	Not null
Condonation_paid	Varchar	10	Not null
Semester	Varchar	23	Not null
Year	Varchar	10	Not null

NOTES

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Table Name: Passing Board

Field Name	Data Type	Length	Constraints
members_id	Int	10	Foreign key
Date	date	<sup>1</sup> II	Primary key
Sem	Int	10	Not null
Branch	varchar	10	Primary key
Summary	mediumtext	200	Not null
max_marks_student	float	10	Not null
subject1	varchar	20	Not null
mark l	float	10	Not null
special_sub	varchar	20	Not null
special_marks	float	10	Not null

### Table Name: Remuneration

Field Name	Data Type	Length	Constraints
Staff_id	Int	11	Primary key
Camp_attendence	float	11	Not null
no_of_papers	Int	11	Not null
payment_paid	varchar	10	Not null
Date	date	10	Not null

NOTES

### Table Name: Staff

#### VB.NET & RDBMS Lab

Field Name	Data Type	Length	Constraints
Staff_id	Int	11	Primary key
Staff_name	Varchar	11	Not null
SCollege	Varchar	11	Not null
Designation	Varchar	10	Not null
Email_id	Varchar	10	Not null
Experience	Int	10	Not null

### NOTES

### **Telephone Directory**

### Customer Table

S.No.	Field Name	Data Type
1	Id	N <mark>um</mark> ber
2	Name	Text
3	Addreess 5	Text
4	Provider	Text

### Service Provider Table

S.No.	Field Name	Data Type
1	Id	Number
2	Plan	Number
3	Issue_date	Date/time
4	Due_date	Date/time
5	Providername	Text

### Directory Table

S.No.	Field Name	Data Type
1	add new	Number
2	Group	Number
3	Move	Number
4	Copy	Number

### GAS BOOKINGAND DELIVERING

### Table Design Of Online Gas Booking Management System

### Price Details

### NOTES

Column Name	Data Type	Remark
Cylntype	Varchar (10)	Cylinder Type
price	float (4,2)	Price

### **Billing Details**

Column Name	Data Type	Remark
Blid	Integer	Billing Id
Consno	Integer	Customer Number
Cylintype	Varchar (10)	Cylinder Type
bkdate	Datetime	Booked Date
deldate	Datetime	Delivery Date
amt	Float (4,2)	Amount

#### Customer Details

Column Name	Data Type	Remark
Consno	Integer	Customer Number
Pass	Varchar (8)	Password
Cylintype	Varchar (10)	Cylinder Type
dtofconn	Datetime	Connection Date
Cname	Varchar (25)	Customer Name
Caddr	Varchar (50)	Customer address
City	Varchar(15)	Customer city
Phone	Number (10)	Phone number
Pincode	Number (6)	Pin code

### Stock Details

Column Name	Data Type	Remark
Sdt	Datetime	Date
Storeccom	Integer	Stock received Commercial
Storecdom	Integer	Stock received Domestic
Defcomm	Integer	Defective in Commercial
Defdom	Integer	Defective in Domestic
Cstocom	Integer	Current stock commercial
Cstodom	Integer	Current stock domestic

### **Transaction Details**

Column Name	Data Type	Remark
TId	Integer	Transaction Id
Consno	Integer	Customer Id
Cylntype	Varchar(10)	Cylinder Type
Bkdt	Datetime	Customer Name
Deldt	Datetime	Customer address
Status	Varchar(10)	Status of transaction

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### ELECTRICITY BILL PROCESSING

### Table Name: BILL

Field Name	Data Type	Size	Constraint
Bill_no	Number	Auto	Primary key
BillDate	Date		
Amount	Number	Auto	
City	Text	30	

### Table Name: Customer

Field Name	Data Type	Size	Constraint
Customer First Name	Text	10	
Customer Middle Name	Text	10	
Customer Last Name	Text	10	
Cust_id	Number	Auto	Primary Key
Service_Centre	Text	20	1. A
Street	Text	20	
City	Text	20	
City Code	Number	Auto	
State	Text	20	

#### Service Centre Table

Field Name	Data Type	Size	Constraint
Cust_id	Number	Auto	Foreign Key
Service_Centre	Text	20	
Street	Text	20	
City	Text	20	
City Code	Number	Auto	
State	Text	10	

### Bill Charge Table

Field Name	Data Type	Size	Constraint
Bill_no	Number	Auto	Primary Key
Fix _charge	Number	Auto	2
E_duty	Number	Auto	
Total Charge	Number	Auto	
Total Unit	Number	Auto	

### Commercial Bill Table

Field Name	Data Type	Size	Constraint
Customer Name	Text	20	
Shop_no	Text	20	Primary Key
Street	Text	20	
Bill_no	Integer	Auto	Foreign Key
Bill Amount	Integer	Auto	
Bill Date	Date		

### NOTES

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### **BANK TRANSACTION**

#### Table Name: LOGIN

### Description: This table is used to store Login details.

NOTES

Key	Field Name	Data Type	Length	
PK	ACCOUNTNO	VARCHAR	12	
	PASSWORD	VARCHAR	45	

### Table Name: CLIENTS

Description: This table is used to store customer details.

Key	Field Name	Data Type	Length	
er en de s	NAME	VARCHAR	45	
	SURNAME	VARCHAR	45	
	INITIAL	VARCHAR	10	
	ACCOUNTTYPE	VARCHAR	45	
	SEX	VARCHAR	6	
	D.O.B	DATE		
	ADDRESS	VARCHAR	200	
	MOBILENO	VARCHAR	10	
	TELEPHONENO	VARCHAR	10	
	EMAIL	VARCHAR	45	
PK	ID_PASSPORT	VARCHAR	45	

#### Table Name: ACCOUNT

Description: This table is used to store account details.

Key	Field Name	Data Type	Length
FK	ACCOUNTNO	VARCHAR	12
	ACCOUNTTYPE	VARCHAR	45
	ACCOUNTHOLDER	VARCHAR	45
	DATEOPENED	DATE	
	BRANCHCODE	INT	5
	DATEAPPROVED	DATE	2
	ACCOUNTBALANCE	DECIMAL	
	APPROVED	VARCHAR	6
	DISAPPROVED	VARCHAR	6

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### Table Name: TRANSACTION

### Description: This table is used to store the transaction details

Key	Field Name	Data Type	Length	20 6
FK	ACCOUNTNO	VARCHAR	12	
	TRANSACTIONID	INT		
2 5	TYPEOFTRANSACTION	VARCHAR	45	60 20
	TRANSACTIONDATE	DATETIME	15	
	REFERENCE	VARCHAR	45	

#### **PAYROLL PROCESSING**

User Table:

user_id(int) – Primary Key	Id for the user.	
user_name(varchar)	Enter the name of the user.	
password(varchar)	Enter the password of the user.	~
email_id(varchar)	Enter the email_id of the user.	8
usertype(varchar)	Enter the type of user.	3

### Department Table:

dept_id(int) - Primary key	Id of the Department.	
dept_name(varchar)	Name of the Department.	

### Grade Table:

Id of the pay grade.
Name of the pay grade.
Short name of the pay grade.
Enter the basic amount.
The amount of the Travel Allowance.
The amount of the Dearness Allowance.
The amount of the House Rent Allowance.
The amount of Medical Allowance.
The amount of bonus received.
Amount of Provident Fund to be deducted.
Amount of Professional Tax to be deducted.

VB.NET & RDBMS Lab

#### NOTES

### NOTES

emp_id(int) – Primary Key	ld of the employee.
emp_title(varchar)	Enter the title of employee.
emp_name(varchar)	Enter the name of employee.
emp_dob(date)	Enter the date of birth of employee.
emp_doj(date)	Enter the date of join of employee.
emp_address(varchar)	Enter the address of the employee.
emp_city(varchar)	Enter the city of the employee.
emp_pincode(int)	Enter the pincode of the employee.
emp_mobile_no(int)	Enter the mobile number of the employee.
emp_state(varchar)	Enter the state of the employee.
emp_mail_id(varchar)	Enter the mail id of the employee.
emp_pan_no(varchar)	Enter the Pan number of the employee.
emp_upload_pan()	Enter the pan card image of the employee.

Employee Table:

### Employee Grade Details:

transaction_id(int)- Primary Key	Unique transaction id.
emp_id(int)	Employee id of employee.
emp_dept_id(int)	Department Id of employee.
emp_grade_id(int)	Grade Id of employee.
emp_from_date(date)	Date of join of employee in a department.
emp_to_date(varchar)	Last date of an employee in a department.

### Employee Salary Details:

transaction_id(int) -Primary Key	Unique primary key.
emp_id(int)	Employee Id of employee.
emp_salary_month(varchar)	Employee Salary month.
emp_salary_year(varchar)	Employee salary year.
emp_salary_eimbursment_date(datetime)	The date and time when employee salary was generated.
emp_dept_id(int)	department Id of the employee.
emp_grade_id(int)	grade id of the employee

emp_basic(int)	Enter the amount of the basic.
emp_da(int)	The amount of dearness Allowance.
emp_ta(int)	The amount of travel allowance.
emp_hra(int)	The amount of House Rent Allowance.
emp_ma(int)	The amount of Medical Allowance.
emp_bonus(int)	The amount of Bonus.
emp_pf(int)	The amount of Provident Fund to be deducted.
emp_pt(int)	The amount of Professional Tax to be deducted.
emp_gross(int)	The gross total received by employee.
emp_total_salary(int)	The total salary received after deduction.

### NOTES

### PERSONAL INFORMATION SYSTEM

Question database and conducting quiz and personal diary

### Student Table:

s id	sname	dept	pass	e-mail
02201048	palash	cse	123	Msap71@yahoo.com
02201018	saikot	cse	012	Saikot1@gmail.com
02201070	rumi	CS	324	Rumi12@gmail.com
02201154	nasim	cse	786	Nasim1@hotmail.com

### Teacher Table

T_id	tname	dept	pass	e-mail
012	Dr. karim rahman	cse	0012	karim12@yahoo.com
009	Abdur rouf sarkar	cse	abc	sarkar@gmail.com
003	Dr.Rahim	ess	236	rahim@gmail.com

### Course Table

c id	Cname	T id	
Cse420	compiler	012	-
Cse310	Java programming	009	
Cse474	Simulation & modeling	003	

### Schedule Quiz Table

g num	Tques	tmark	stime	etime	sdate	edate	c_id	T_id
1	10	100	12.00pm	12.30pm	3/6/07	5/6/07	Cse420	012
2	20	40	10.00am	10.20	10/5/07	15/5/07	Cse474	003
1	10	50	2.00pm	3.00pm	5/5/07	6/5/07	Cse310	009

### Question Table:

NOTES
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Admin Table:       a_id     aname     pass     e-mail       789     Mr.roton     mrt     Mrt12@qmail.com       889     Mrs sharmin     mnb     Sha122@yahoo.cor       885     Mr. abul     ccz     Ant2000@yahoo.co       Registered Table:       s_id     c_id       Palash     Cse420       Soikot     Cse474       Nasim     Cse474       Quiz Info Table:       s_id     t_id     c_id       Quiz Info Table:       s_id     t_id       Quiz Info Table:       Sid     t_id       02201048     00010001     CSE391     1     yes       02201154     00010001     CSE391     1     no	Admin Table:       Bass     e-mail       Registered Table:       s_id     c_id       Palash     Cse420       Soikot     Cse474       Nasim     Cse474       Quiz Info Table:     ges       s_id     t_id     c_id     quiz Info Table:       s_id     t_id     c_id     quiz Info Table:       s_id     t_id     c_id     quiz Info Table:       s_id     t_id     c_id     quin status       02201048     00010001     CSE391     1     yes       02201154     00010001     CSE391     1     no	glevel	gnum	sub_id	question	Op1	Op2	Op3	Op4	ans	mark	q_num
Admin Table:     a_id   aname   pass   e-mail     789   Mr.roton   mrt   Mrt12@qmail.com     889   Mrs sharmin   mnb   Sha122@yahoo.cor     885   Mr. abul   ccz   Ant2000@yahoo.co     Registered Table:     s_id   c_id     Palash   Cse420   Soikot     Soikot   Cse474   Nasim     Quiz Info Table:     s_id   t_id   c_id     Quiz Info Table:     s_id   t_id     Quiz Info Table:     S_id   t_id   c_id     Quiz Info Table:     S_id   t_id   c_id     Quiz Info Table:     S_id   t_id   c_id   qnum   status     Q2201048   00010001   CSE391   1   yes     Q2201154   00010001   CSE391   1   no	Admin Table:     a_id   aname   pass   e-mail     789   Mr.roton   mrt   Mrt12@qmail.com     889   Mrs sharmin   mnb   Sha122@yahoo.com     885   Mr. abul   ccz   Ant2000@yahoo.com     Registered Table:     s_id   c_id     Palash   Cse420     Soikot   Cse474     Nasim   Cse474     Quiz Info Table:     s_id   t_id   c_id     Quiz Info Table:   1   yes     02201048   00010001   CSE391   1   yes     02201154   00010001   CSE391   1   no						č.					
Admin Table:     a_id   aname   pass   e-mail     789   Mr.roton   mrt   Mrt12@qmail.com     889   Mrs sharmin   mnb   Sha122@yahoo.cor     885   Mr. abul   ccz   Ant2000@yahoo.co     Registered Table:     s_id   c_id     Palash   Cse420   Soikot     Soikot   Cse474   Quiz Info Table:     S_id   t_id     Quiz Info Table:   status     02201048   00010001   CSE391   1   yes     02201154   00010001   CSE391   1   no	Admin Table:     a_id   aname   pass   e-mail     789   Mr.roton   mrt   Mrt12@qmail.com     889   Mrs sharmin   mnb   Sha122@yahoo.com     885   Mr. abul   ccz   Ant2000@yahoo.cor     Registered Table:     s_id   c_id     Palash   Cse420   Soikot     Soikot   Cse474   Quiz Info Table:     s_id   t_id   c_id   qnum   status     02201048   00010001   CSE391   1   yes     02201154   00010001   CSE391   1   no	;	2 3				3	2 I	e ý		6 1	8
a_id     aname     pass     e-mail       789     Mr.roton     mrt     Mrt12@qmail.com       889     Mrs sharmin     mnb     Sha122@yahoo.cor       885     Mr. abul     ccz     Ant2000@yahoo.co       Registered Table:       s_id     c_id       Palash     Cse420     Soikot       Soikot     Cse474     Quiz Info Table:       s_id     t_id       Quiz Info Table:     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	a_id     aname     pass     e-mail       789     Mr.roton     mrt     Mrt12@qmail.com       889     Mrs sharmin     mnb     Sha122@yahoo.com       885     Mr. abul     ccz     Ant2000@yahoo.com       Registered Table:       s_id     c_id       Palash     Cse420       Soikot     Cse474       Nasim     Cse474       Quiz Info Table:        s_id     t_id     c_id       Quiz Info Table:        02201048     00010001     CSE391     1       02201154     00010001     CSE391     1     no				<i>I</i>	l Admir	Table	 :				
a_id     analic     pass     c-mail       789     Mr.roton     mrt     Mrt12@qmail.com       889     Mrs sharmin     mnb     Sha122@yahoo.cor       885     Mr. abul     ccz     Ant2000@yahoo.cor       Registered Table:       s_id     c_id       Palash     Cse420       Soikot     Cse474       Nasim     Cse474       Quiz Info Table:        s_id     t_id     c_id       Quiz Info Table:        02201048     00010001     CSE391       02201018     00010002     CSE421       02201154     00010001     CSE391	and   pass   ernal     789   Mr.roton   mrt   Mrt12@qmail.com     889   Mrs sharmin   mnb   Sha122@yahoo.com     885   Mr. abul   ccz   Ant2000@yahoo.com     Registered Table:     s_id   c_id     Palash   Cse420   Soikot     Soikot   Cse474   Quiz Info Table:     s_id   t_id   c_id   qnum   status     02201048   00010001   CSE391   1   yes   02201018   00010002   CSE421   2   Yes     02201154   00010001   CSE391   1   no   no	a id		anar	ne	n	266			-mail		
Note     Marceletine       889     Mrs sharmin     mnb     Sha122@yahoo.cor       885     Mr. abul     ccz     Ant2000@yahoo.co        Registered Table:     Signature       s_id     c_id     Cse420       Soikot     Cse474     Cse474       Nasim     Cse474     Quiz Info Table:       s_id     t_id     c_id     qnum     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	No.     Mill     Intraceditation       889     Mrs sharmin     mnb     Sha122@yahoo.com       885     Mr. abul     ccz     Ant2000@yahoo.com       Registered Table:       s_id     c_id       Palash     Cse420       Soikot     Cse474       Nasim     Cse474       Quiz Info Table:        s_id     t_id     c_id       Quiz Info Table:        02201048     00010001     CSE391       02201018     00010002     CSE421       02201154     00010001     CSE391	789		Mrra	oton	n	nrt		N	Art120	Damail	com
Solo     Interview     Int	Solo     Internation     Internation	889		Mrs	sharmin	n	nb		S	ha12	2@vah	oo com
s_id     c_id       Palash     Cse420       Soikot     Cse474       Nasim     Cse474       Quiz Info Table:	Registered Table:     s_id   c_id     Palash   Cse420     Soikot   Cse474     Nasim   Cse474     Quiz Info Table:   Sid   t_id   c_id   qnum   status     02201048   00010001   CSE391   1   yes   02201018     02201154   00010001   CSE391   1   no	885		Mr. a	C	CZ		A	nt200	00@yal	noo.con	
s_id     c_id       Palash     Cse420       Soikot     Cse474       Nasim     Cse474       Quiz Info Table:       s_id     t_id     c_id     qnum     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	s_id c_id   Palash Cse420   Soikot Cse474   Nasim Cse474   Quiz Info Table:   s_id t_id c_id qnum status   02201048 00010001 CSE391 1 yes   02201018 00010002 CSE421 2 Yes   02201154 00010001 CSE391 1 no				Re	gister	ed Tab	le:				
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Soikot     Cse474       Nasim     Cse474       Quiz Info Table:     Quiz Info Table:       s_id     t_id     c_id     qnum     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	Soikot     Cse474       Nasim     Cse474       Quiz Info Table:       s_id     t_id     c_id     qnum     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	Palash					Cse4	20				
Nasim     Cse474       Quiz Info Table:     Quiz Info Table:       s_id     t_id     c_id     qnum     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	Nasim     Cse474       Quiz Info Table:     Quiz Info Table:       s_id     t_id     c_id     qnum     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	Soikot					Cse4	74				
Quiz Info Table:       s_id     t_id     c_id     qnum     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	Quiz Info Table:       s_id     t_id     c_id     qnum     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	Nasim				3	Cse4	74				
s_id     t_id     c_id     qnum     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	s_id     t_id     c_id     qnum     status       02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no				Q	uiz Inf	fo Tabl	e:				
02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	02201048     00010001     CSE391     1     yes       02201018     00010002     CSE421     2     Yes       02201154     00010001     CSE391     1     no	s_id	TALKI ON	t_id	C	_id		qnu	Im	10 10	status	ĉ
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# Master of Computer Applications 31554 / 34054 VISUAL BASIC WITH .NET LAB

V - Semester





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