Student Learning Objectives

* Timer control
* Tool Tip Control
* Picture Box Control
* Menu Controls
  + Using the **OpenFileDialog**
  + Using the Copy, Paste and Cut Clip Board
* Random Class

**There are 11 print screens/code copy each worth 9.09%**

Working with the timer control

**Project #1**

**Design**

**Graphical user interface, application

Description automatically generated**

**Code**

**Text

Description automatically generated**

**#1 print screen the output with code below here**

**Graphical user interface, application

Description automatically generated**

Public Class Controls

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

TextBox1.Text = "0"

Timer1.Enabled = True

End Sub

Private Sub Button2\_Click(sender As Object, e As EventArgs) Handles Button2.Click

Timer1.Enabled = False

End Sub

Private Sub Timer1\_Tick(sender As Object, e As EventArgs) Handles Timer1.Tick

TextBox1.Text = (CDbl(TextBox1.Text) + 0.1).ToString("N1")

End Sub

Working with the Tool Tip control

**Project #2**

The Visual Basic IDE uses tooltips to identify buttons on the Toolbar and icons in the Toolbox. When we hover the mouse over one of these items, a small rectangular box appears after second and remains visible for 5 seconds. The ToolTip control allows us to create tooltips for the controls in our programs.

**Design**

Graphical user interface, application

Description automatically generated

**Code**

Text, letter

Description automatically generated

To use the tool tip on the 1st text box



Click on the tooltip control and change the isBalloon = true, which will give us a balloon effect



**#2 print screen the output with code below here  
Graphical user interface, application

Description automatically generated**

Private Sub Button3\_Click(sender As Object, e As EventArgs) Handles Button3.Click

Dim taxRate As Decimal = CDec(TextBox2.Text) / 100

Dim price As Decimal = CDec(TextBox3.Text)

Dim totalCost As Decimal = price + (taxRate \* price)

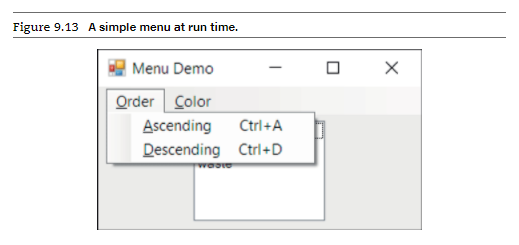
MessageBox.Show("Price " & totalCost.ToString("C"))

End Sub

Working with the Menu control

**Project #3**

**Design**

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**Code**

On the load event add the following to the list box

Text

Description automatically generated

Double click on the Ascending Menu and type in the following code

A picture containing chart

Description automatically generated

Double click on the Descending Menu and type in the following code

Graphical user interface, text

Description automatically generated

Create a menu Color as shown below for Red, Blue, Yellow, and White

Graphical user interface, application

Description automatically generated

Red Sub Menu Code



Blue Sub Menu Code

A picture containing logo

Description automatically generated

Yellow Sub Menu Code

A picture containing text

Description automatically generated

White Sub Menu Code

A close up of a screen

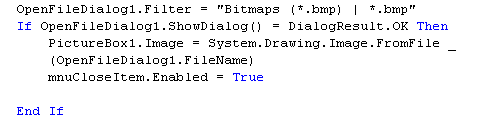
Description automatically generated

Create another sub menu and name it open as shown below under the Order menu

Graphical user interface, text, application

Description automatically generated

Double click on the Open Sub menu and type in the following code, the code will find all .bmp files when it is pressed.



**#3 print screen the output below here**

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**#4 copy and paste the code below here**

Public Class Colors

Private Sub RedToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles RedToolStripMenuItem.Click

ListBox1.ForeColor = Color.Red

End Sub

Private Sub BlueToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles BlueToolStripMenuItem.Click

ListBox1.ForeColor = Color.Blue

End Sub

Private Sub YellowToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles YellowToolStripMenuItem.Click

ListBox1.ForeColor = Color.Yellow

YellowToolStripMenuItem.Checked = False

WhiteToolStripMenuItem.Checked = True

End Sub

Private Sub WhiteToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles WhiteToolStripMenuItem.Click

ListBox1.ForeColor = Color.White

YellowToolStripMenuItem.Checked = False

WhiteToolStripMenuItem.Checked = True

End Sub

Private Sub OpenToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles OpenToolStripMenuItem.Click

OpenFileDialog1.Filter = "Bitmaps (\*.bmp) | \*.bmp"

If OpenFileDialog1.ShowDialog() = DialogResult.OK Then

PictureBox1.Image = System.Drawing.Image.FromFile(OpenFileDialog1.FileName)

End If

End Sub

Private Sub Colors\_Load(sender As Object, e As EventArgs) Handles MyBase.Load

ListBox1.Items.Add("C")

ListBox1.Items.Add("B")

ListBox1.Items.Add("A")

End Sub

Private Sub AscendingToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles AscendingToolStripMenuItem.Click

ListBox1.Sorted = True

End Sub

Private Sub DescendingToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles DescendingToolStripMenuItem.Click

Dim temp(2) As String

ListBox1.Sorted = True

For i As Integer = 0 To 2

temp(i) = CStr(ListBox1.Items(i))

Next

ListBox1.Sorted = False

ListBox1.Items.Clear()

For i As Integer = 2 To 0 Step -1

ListBox1.Items.Add(temp(i))

Next

End Sub

End Class

**Project #4**

**Graphical user interface, text, application

Description automatically generated**

**Code**

This example copys text to a clip board

**A picture containing text

Description automatically generated**

Note: Complete the code for the Paste and Cut sub menus.

**#5 print screen the output with code below here**

**Graphical user interface, text

Description automatically generated**

**Graphical user interface, text, application

Description automatically generated**

**Graphical user interface, application

Description automatically generated**

Public Class Clipboard

Private Sub CopyToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles CopyToolStripMenuItem.Click

My.Computer.Clipboard.SetText(TextBox1.Text)

MessageBox.Show("Text copied to clipboard")

End Sub

Private Sub PasteToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles PasteToolStripMenuItem.Click

TextBox1.Text = My.Computer.Clipboard.GetText

MessageBox.Show("Text Pasted")

End Sub

Private Sub CuTToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles CuTToolStripMenuItem.Click

My.Computer.Clipboard.SetText(TextBox1.Text)

TextBox1.Text = ""

MessageBox.Show("Text Cut")

End Sub

End Class

**Project #5**

**Random Class**

**Graphical user interface, text, application, email

Description automatically generated**

**Code**

**A picture containing text

Description automatically generated**

Add a Button control labeled as **Display Contestants** and a List Box for the output. Here we are shuffling string names

Text

Description automatically generated

**#6 print screen the output below here**

**Graphical user interface, text, application

Description automatically generated**

**Graphical user interface, application, Word

Description automatically generated**

**Graphical user interface, application, Word

Description automatically generated**

**#7 copy and paste the code below here**

Private Sub Button2\_Click(sender As Object, e As EventArgs) Handles Button2.Click

Dim r As New Random

Dim contestants() As String = {"Mary", "Pat", "Linda", "Barbara", "Maria"}

Dim number As Integer, temp As String

For i As Integer = 0 To 4

number = r.Next(i, 5)

temp = contestants(i)

contestants(i) = contestants(number)

contestants(number) = temp

Next

ListBox1.Items.Clear()

For i As Integer = 0 To 4

ListBox1.Items.Add(contestants(i))

Next

End Sub

End Class

Powerball code

Public Class RandomClass

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

TextBox1.Text = False

TextBox2.Text = False

TextBox1.BackColor = Color.Blue

TextBox1.ForeColor = Color.Red

TextBox2.BackColor = Color.Black

TextBox2.ForeColor = Color.Red

TextBox1.Text = Math.Floor(Rnd() \* 69) & " " & Math.Round(Rnd() \* 69) & " " & Math.Round(Rnd() \* 69) & " " & Math.Round(Rnd() \* 69) & " " & Math.Round(Rnd() \* 69)

TextBox2.Text = Math.Floor(Rnd() \* 29)

End Sub

**Project #6**

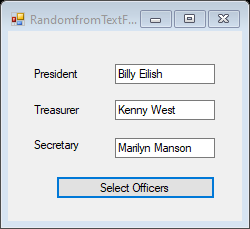
Note: ***Create*** a members.txt file with four members

Graphical user interface, text, application, email

Description automatically generated

**Note: Complete the Offices App program.**

**#8 Print screen the output below here**

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**#9 Copy and paste your code below here**

Public Class RandomfromTextFile

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

Dim officers() As String = IO.File.ReadAllLines("C:\Users\angel\Desktop\Project6.txt")

Dim number As Integer, temp As String

Dim r As New Random

For i As Integer = 0 To 2

number = r.Next(i, 3)

temp = officers(i)

officers(i) = officers(number)

officers(number) = temp

TextBox1.Text = officers(i)

Next

For i As Integer = 0 To 2

If TextBox3.Text.Length = TextBox1.Text.Length Then

number = r.Next(i, 3)

temp = officers(i)

officers(i) = officers(number)

officers(number) = temp

TextBox2.Text = officers(i)

End If

Next

For i As Integer = 0 To 2

If TextBox3.Text.Length = TextBox2.Text.Length Or TextBox1.Text.Length Then

number = r.Next(i, 3)

temp = officers(i)

officers(i) = officers(number)

officers(number) = temp

TextBox3.Text = officers(i)

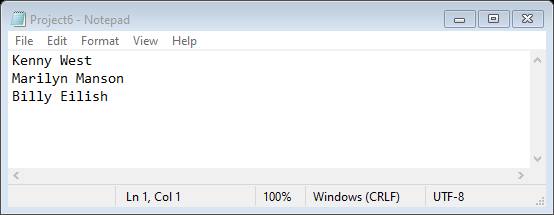
End If

Next

End Sub

End Class

**#10 Open your note pad with the members listed and print screen it below here**

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**Project #7**

**Tool Tip**

**Graphical user interface, text, application

Description automatically generated**

**Note: Complete the tool tip assistance program, add only the tool tip on the Name text box.**

**#11 print screen the output with code below here**Graphical user interface, application

Description automatically generated

**Graphical user interface, application

Description automatically generated**

**Submit this document to Module 10 Class Exercise**