CENTRE FOR DIPLOMA STUDIES

MULTIMEDIA CONCEPT

LABORATORY INSTRUCTION SHEET

Course Code	**DAT 21103**
Lab Practical Title	**BASIC SETTING OF OBJECT CONTROLS**
Lab Practical	**3**

Learning Outcome(s)

At the end of this practical session, students should be able to:

1. Use textbox to capture data keyed in.
2. Use labels to display information.
3. Use command button to perform task.
4. Use picture box to display image.
5. Use radio button to enable selection.
6. Use group box to group controls.
7. Set suitable basic properties, methods, and events for object controls.

Guided Task 3.1: Price of Chicken

This guided task shows example of program using Textbox and Label.

Problem 3.1:

Create a program that calculates price of chicken at a shop selling them at RM 5.70 per kilogram. User enters weight of chicken in a textbox and price displayed in a label when a command button clicked.

Solve problem using following steps:

Step 1: **Design form**

- A textbox - capture weight of chicken
- A label - display price
- A command button - calculate price

(refer Figure 3.1)

Step 2: **Set properties**

Refer Figure 3.1.

Figure 3.1

Step 3: **Write code**

Double click command button to view Code window. Complete program (refer Figure 3.2).

```
Public Class Form1
    Private Sub btnCalculate_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btnCalculate.Click
        lblTotalPrice.Text = txtWeight.Text * 5.7
    End Sub
End Class
```

Figure 3.2

Step 4: **Run program and debug (if needed)**
Run program (press F5 or click Run icon on Standard toolbar).
Key in 1.5 in textbox
Click command button
Does the value 8.55 appears on label?

Guided Task 3.2: Light Bulb Indicator
This guided task shows example of program using Radio Button, Textbox and Picture Box.

Problem 3.2:
Create a program that tells the user to switch a light bulb on and off, based on the current state of the bulb. User enters name in a textbox and select a colour using a radio button (not necessarily in that order). When the picture of a light bulb in a picture box clicked, the opposite state of the bulb shown, along with a message to turn it on or off.

Solve problem using following steps:

Step 1: **Design form**

- A textbox - enter name
- Two picture boxes, one on top of the other. Only one will be visible at a time – display bulb state
- A groupbox - group colours
- Radio buttons - select colour of text in label beneath picture box
- A command button - quit program

(refer Figure 3.3)

Step 2: **Set properties**

Refer Figure 3.3.

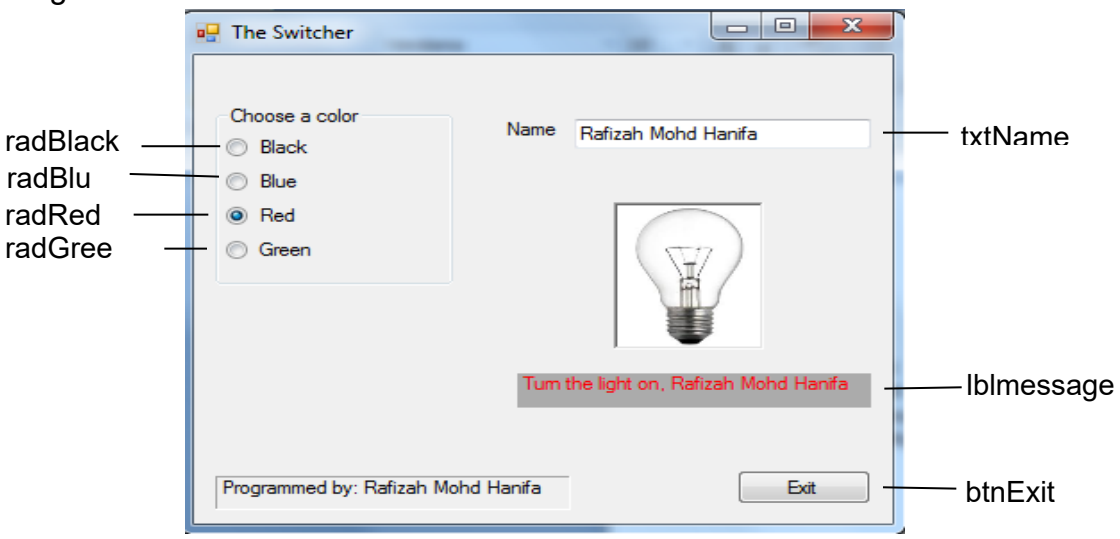

Figure 3.3

Step 3: **Write code**

Double click object controls (radio buttons, picture boxes, command button) which involve an event and write suitable statements in event procedures as follows:

```
Public Class Form1
      Private Sub radBlack_CheckedChanged(ByVal sender As   System.Object,
      ByVal e As System.EventArgs) Handles      radBlack.CheckedChanged
              lblMessage.Text = "Turn the light off, " & txtName.Text
              lblMessage.ForeColor = Color.Black
      End Sub

      Private Sub radBlue_CheckedChanged(ByVal sender As System.Object,
      ByVal e As System.EventArgs) Handles radBlue.CheckedChanged
              lblMessage.Text = "Turn the light off, " & txtName.Text
              lblMessage.ForeColor = Color.Blue
      End Sub
      Private Sub radRed_CheckedChanged(ByVal sender As System.Object, ByVal
      e As System.EventArgs) Handles radRed.CheckedChanged
              lblMessage.Text = "Turn the light off, " & txtName.Text
              lblMessage.ForeColor = Color.Red
      End Sub
      Private Sub radGreen_CheckedChanged(ByVal sender As System.Object,
      ByVal e As System.EventArgs) Handles radGreen.CheckedChanged
              lblMessage.Text = "Turn the light off, " & txtName.Text
              lblMessage.ForeColor = Color.Green
      End Sub
```

```
    Private Sub PictureBox1_Click(ByVal sender As System.Object, ByVal e
    As System.EventArgs) Handles PictureBox1.Click
            PictureBox1.Visible = False
            PictureBox2.Visible = True
            lblMessage.Text = "Turn the light on, " & txtName.Text
    End Sub
    Private Sub PictureBox2_Click(ByVal sender As System.Object, ByVal e
    As System.EventArgs) Handles PictureBox2.Click
            PictureBox2.Visible = False
            PictureBox1.Visible = True
            lblMessage.Text = "Turn the light off, " & txtName.Text
    End Sub
    Private Sub btnExit_Click(ByVal sender As System.Object, ByVal e As
    System.EventArgs) Handles btnExit.Click
            Me.Close()
    End Sub
End Class
```

Practical tasks:

1. Create a program to convert temperature from Fahrenheit to Celsius. Use following table to check if program runs correctly.

Fahrenheit	Celsius
63	17.222
97.4	36.333

2. Create a program to report the weather. Refer Figure 3.4.

Figure 3.4