## Using Variables

## APPLICATION - DOUBLE YOUR AGE

1. Create the following interface. Name and adjust the objects accordingly.

| Object | Name | Caption/Text |
| :--- | :--- | :--- |
| Label | lblage | Enter your age: |
| Label | Iblagedoubleinstructions | Your age doubled is: |
| Textbox | txtage | Blank (empty) |
| Label | Iblagedoubled | Blank (empty) |
| Button | btnagedoubled | Double Your Age |
| Button | btnend | End |


2. Double-click on the Double Your Age button and enter the following code inside the button procedure.
Private Sub btnagedoubled_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles btnagedoubled.Click
Dim intage As Integer
Dim intagedoubled As Integer
intage $=$ txtage.Text 'obtains user's age
intagedoubled $=$ intage $* 2 \quad$ 'doubles user's age
lblagedoubled.Text = intagedoubled 'displays user's age doubled in the label

End Sub
Double-click on the End button and enter the following code inside the button procedure.

```
Private Sub btnend_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
btnend.Click
        End 'ends program
    End Sub
```

This is what the interface should look like after a user types in 16 for age.

3. Run your program and check for any errors.

## Save the program as: agedoubled_yourlastname

## APPLICATION 2 - CALCULATE YOUR AVERAGE

1. Create the following interface. Name and adjust the objects accordingly.

| Object | Name | Caption/Text |
| :--- | :--- | :--- |
| Label | lblinstruction | This program will calculate the average of four marks. |
| Textbox | txtmark1 | (blank) |
| Textbox | txtmark2 | (blank) |
| Textbox | txtmark3 | (blank) |
| Textbox | txtmark4 | (blank) |
| Label | IbImark1 | Enter your first mark here. |
| Label | IbImark2 | Enter your second mark here. |
| Label | Iblmark3 | Enter your third mark here. |
| Label | Iblmark4 | Enter your fourth mark here. |
| Label | lbldisplayaverage | The average is: |
| Label | Iblaverage | (blank) |
| Button | btnaverage | Calculate Average |
| Button | btnend | End |



## 2. Enter the following code in the btncalculateaverage_Click() procedure:

Private Sub btncalculateaverage_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles btncalculateaverage.Click

Dim dblmark1 As Double, dblmark2 As Double, dblmark3 As Double, dblmark4 As Double Dim dblaverage As Double
dblmark1 = txtmark1.Text
dblmark2 = txtmark2.Text
dblmark3 = txtmark3.Text
dblmark4 = txtmark4.Text
dblaverage = (dblmark1 + dblmark2 + dblmark3 + dblmark4) / 4 lblaverage.text = dblaverage

End Sub
3. Enter the code into the End button so that the program will end when this button is clicked.

```
Private Sub btnend_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles
```

btnend.Click
End

End Sub
4. Comment the lines of code above. You do not need to comment EVERY textbox, since they each do similar things. To comment, use the apostrophe (') before each comment so it does not affect the code.
5. The interface should look like this when the user types in values:


Save the project as: average_yourlastname

