**Chapter 3 TextBox and Variables**

Read pages 65-70 about declaring & using variables, data types and TextBoxes for user input.

**Dim** is a declaration statement. It tells the computer that you are going to

 declare a variable.

Dim radius As Double

Dim name As String

Dim age As Integer

Data types –

**Integer** – holds whole numbers

**Double** – holds decimal numbers

**String** – holds characters inside " "

A textbox allows the user to enter information.

txt is the prefix for a textbox.

A **prompt** is a label that tells the user what to enter in a Text Box.

In order to get information from the textbox to the code, assign the value in the text box to a variable that has been declared.

**Dim candy as String**

**candy = txtCandy.Text**

**Dim radius as Double**

**radius = Val(txtRadius.Text)**

**Dim wheels as Integer**

**wheels = Val(txtWheels.Text)**

**Val** makes sure the entered information is a number.

You will use variables for equations and output (labels).

**Const** – is a constant – Once it is declared, it can never be changed.

Example: **Const PI as Double = 3.14**

 **Const QUARTER as Double = .25**

Const PI As Double = 3.14 - A Const never changes

Put String and math in the same text with &.

lblAnswer.Text = "The temperature in celcius is " & (5/9 \* (temp-32) )

**Scope**

**Local Variables** – variables declared inside an object module only work inside that module

**Global Variables** – variables declared outside an object module, at the top under public class Form1 are available to all object modules in the program. They hold their value throughout the program.

**Order of the code is important!**

1. Declare – Dim the variables with data types – either local or global
2. Assign Value – Assign the value in the Text Box to the variables
3. Equation – Use the variables in equation(s)
4. Show the answer – Assign the answer or variable to a label