

1. If you have not learned **HTML** and **CSS** before, click the links below to quickly learn some basics of them.

<http://www.w3schools.com/html/default.asp>

<http://www.w3schools.com/css/default.asp>

2. If you have not learned **VB** or **VB.NET** before, click the links below to quickly learn some fundamental knowledge of VB. If you are familiar with VB, skip this and create **windows applications** by using **Microsoft Visual Studio** to solve Questions 3 & 4.

Visual Basic Guided Tour,

<http://msdn.microsoft.com/en-us/library/90h82b3x%28v=vs.90%29.aspx>

Variables,

<http://msdn.microsoft.com/en-us/library/cd6hcy37%28v=vs.90%29.aspx>

Data types,

<http://msdn.microsoft.com/en-us/library/47zceaw7.aspx>

Operators and Expressions,

<http://msdn.microsoft.com/en-us/library/a1w3te48%28v=vs.90%29.aspx>

Statements,

<http://msdn.microsoft.com/en-us/library/ha6zwzx0%28v=vs.90%29.aspx>

Control Flow,

<http://msdn.microsoft.com/en-us/library/ca8tdhcs%28v=vs.90%29.aspx>

Arrays,

<http://msdn.microsoft.com/en-us/library/wak0wfyt%28v=vs.90%29.aspx>

Strings,

<http://msdn.microsoft.com/en-us/library/hzcd8ze0%28v=vs.90%29.aspx>

Procedures,

<http://msdn.microsoft.com/en-us/library/y6yz79c3%28v=vs.90%29.aspx>

Type Conversions,

<http://msdn.microsoft.com/en-us/library/hcb26cc8%28v=vs.90%29.aspx>

Object-Oriented Programming in Visual Basic

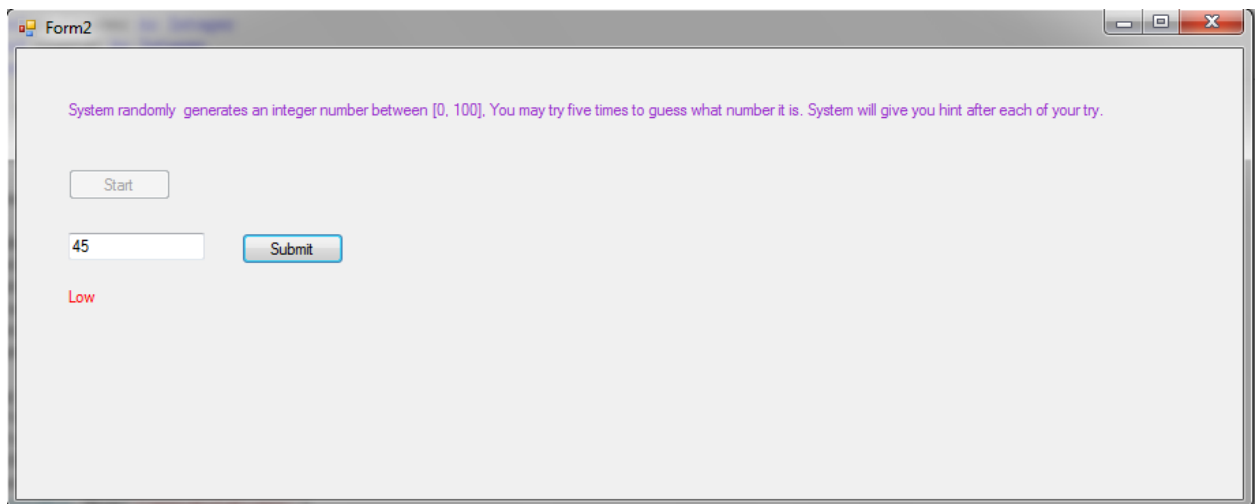
<http://msdn.microsoft.com/en-us/library/b86b82w0%28v=vs.90%29.aspx>

3. The Body Mass Index (BMI) is a commonly used metric to determine whether or not a person is healthy. The BMI calculation is quite simple and is shown as follows:

$$\text{BMI} = \frac{\text{WeightInKilograms}}{\text{HeightInMeters}^2}$$

A person's weight status can be divided into four categories in terms of BMI: Underweight (below 18.5), Normal (18.5 – 24.9), Overweight (25.0 – 29.9), Obese (30.0 and above). You are required to write Visual Basic code to collect user's input, calculate BMI and display corresponding weight status.

4. Write a simple "Guess Number" game. See the demo.



The screenshot shows a Windows-style application window titled "Form2". Inside the window, there is a text label that reads: "System randomly generates an integer number between [0, 100]. You may try five times to guess what number it is. System will give you hint after each of your try." Below this text, there is a "Start" button. Underneath the "Start" button, there is a text input field containing the number "45". To the right of the input field is a "Submit" button. Below the input field, the word "Low" is displayed in red text, indicating that the guess is below the randomly generated number.