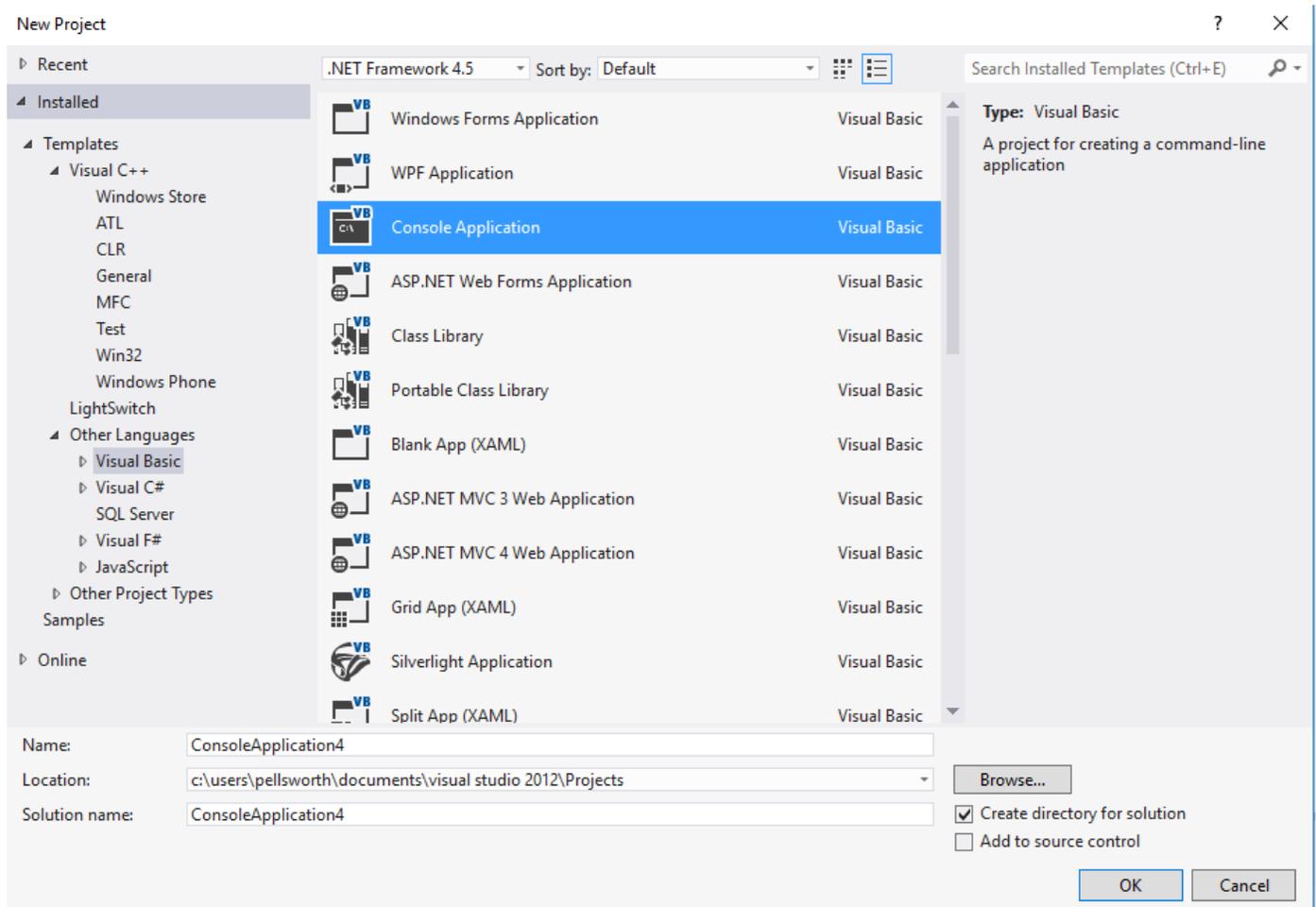Objective: The student will be able to write a simple program to perform basic arithmetic operations.

Directions: Perform the following steps.

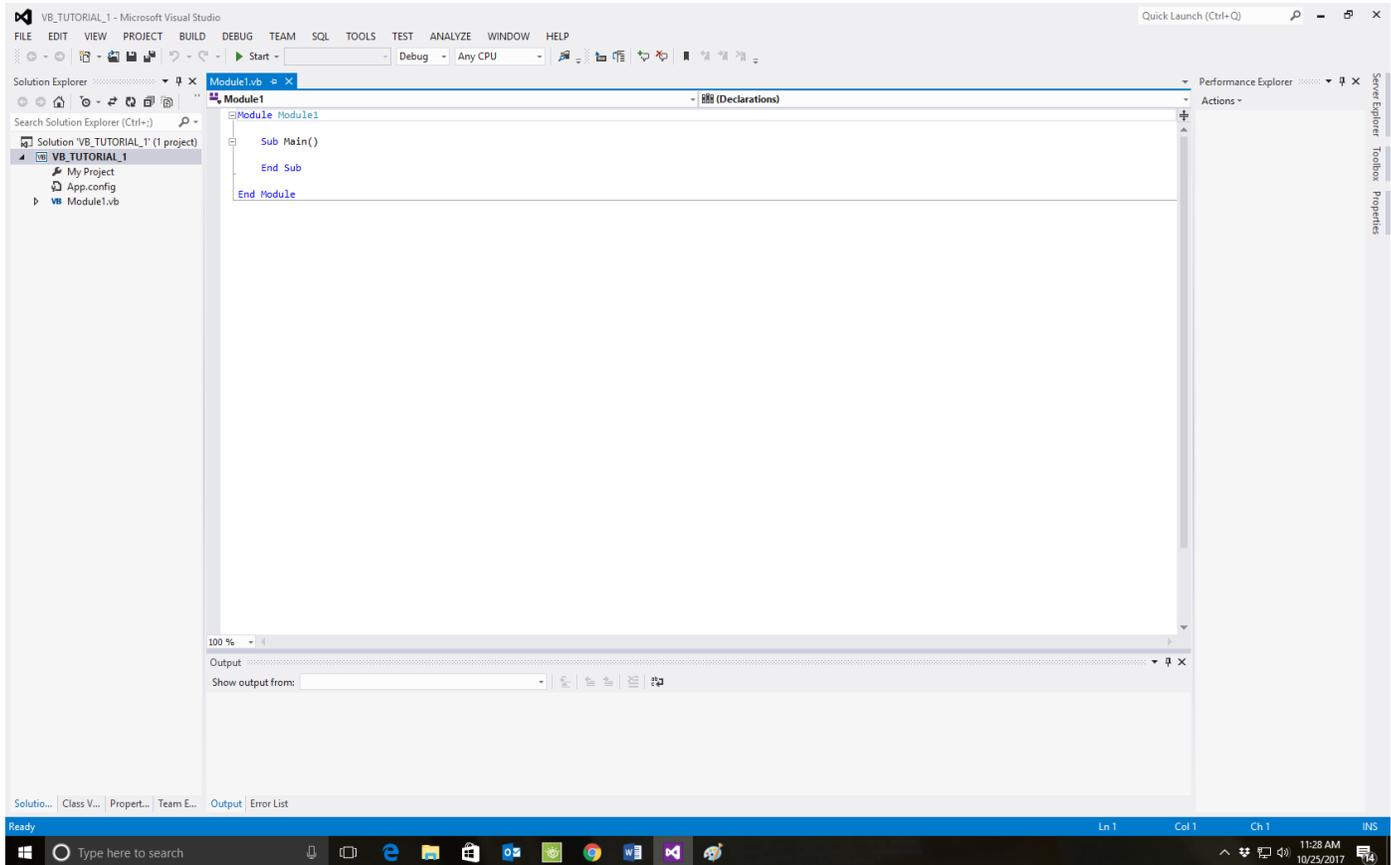Step 1: Start Visual Studio.

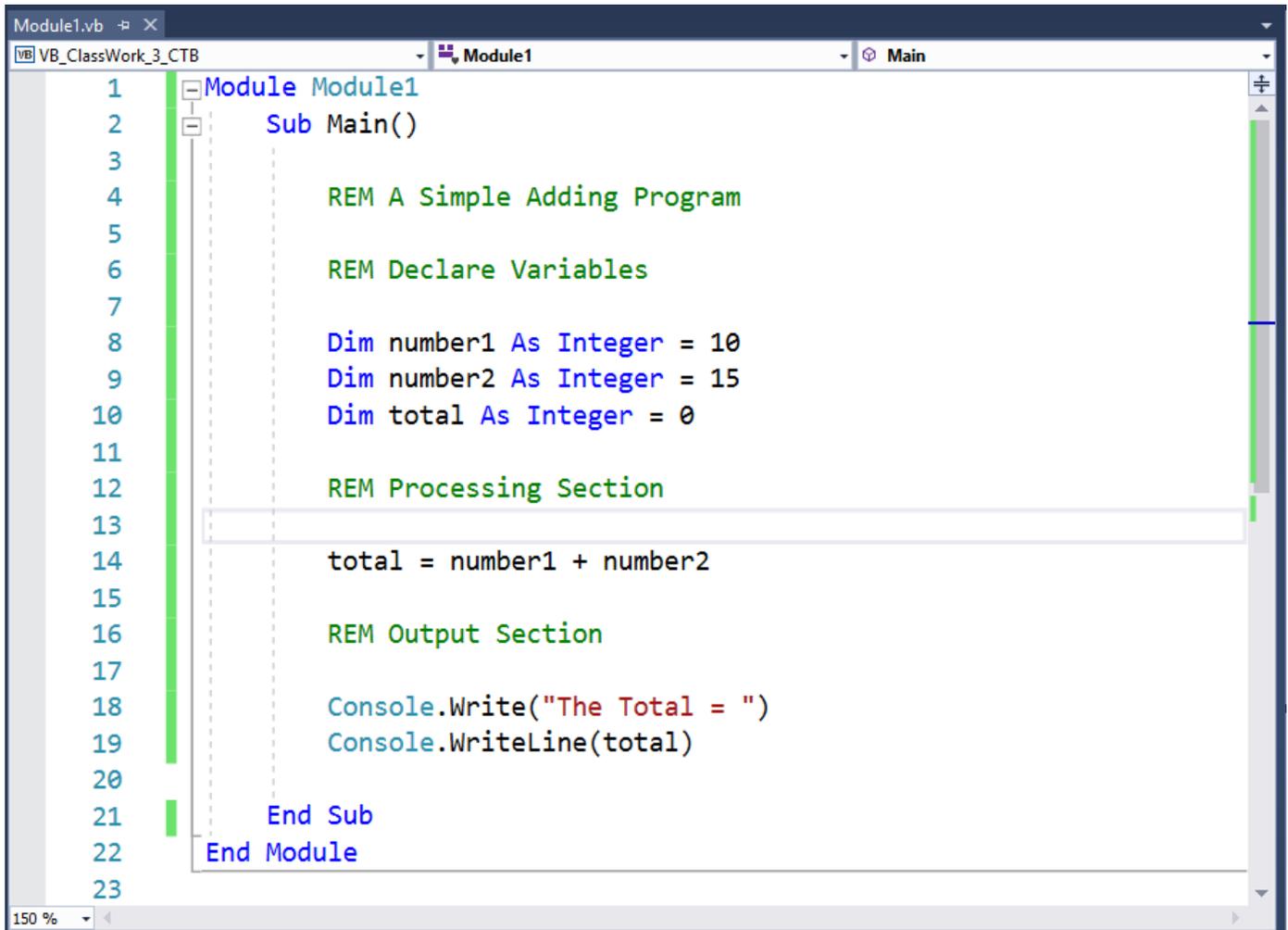Step 2: Select Visual Basic.

Step 3: Select Empty Project.

Step 4: Give the project a meaningful name.

Step 5: Click on OK.

Step 6: Enter the following program:

```vb
Module1.vb  ⊟ X
VB_ClassWork_3_CTB              ▾  Module1              ▾  ⊕ Main              ▾
 1      ⊟Module Module1
 2      ⊟   Sub Main()
 3
 4            REM A Simple Adding Program
 5
 6            REM Declare Variables
 7
 8            Dim number1 As Integer = 10
 9            Dim number2 As Integer = 15
10            Dim total As Integer = 0
11
12            REM Processing Section
13
14            total = number1 + number2
15
16            REM Output Section
17
18            Console.Write("The Total = ")
19            Console.WriteLine(total)
20
21         End Sub
22      End Module
23
150 %  ▾
```

Step 7: REM stand for remark and this is a method for entering comments into the program. Comments are useful information for the programmer. The compiler ignores REM statements. (Another way of indicate a remark is using the single quotation mark, ' . It does exactly the same as the REM; however, I don't use it because it is so small it does not show up on the screen well).

Step 8: The Dim statement stands for Dimension and it is used to declare a variable of a specific type. The most commonly used data types are Integer, Decimal, Boolean, Char, and String. There are other data types that have been defined but they are used less often.

Integer is the data type used to hold counting numbers, both negative and positive.

Decimal is the data type used to hold numbers with a decimal point.

Boolean is the data type used to hold a true or false value.

Char is the data type to hold a single letter.

String is the data type to hold a group of letters.

The statement:

> Dim number1 as Integer = 10

This statement declares the variable number1 to be assigned to a memory location that holds data of type integer and assigns an initial value of 10 to it.

Visual Basic will by default assign a value of 0 to the variable. However, you will have a warning indicator, a green squiggly line under the variable name. This warning indicate the variable has not been assigned a value. Once the variable is used in the program the warning will be removed.

Step 9: The statement:

> total = number1 + number2

This is an assignment statement. The variable total is assigned the value contained in the variable number1 added to the value contained in the variable number2. The equal signed used in the context of this statement means assignment and is referred to as the assignment operator. Notice the + symbol is used to indicate addition. The basic arithmetic operators are:

+	add
-	subtract
*	multiply
/	divide
^	raise to a power

Step 10: The statement:

> Console.Write("The Total = ")

This is a statement to write to the screen. The phrase in double quotes is printed on the screen. This is referred to as a literal string. Anytime you have text between double quotes you have a string.

The word Console is the destination for the string to be written to. In this case Console is defined as the computer screen.

Step 11: The statement:

> Console.WriteLine(total)

This is a statement to write the variable total to the display. Notice that this statement is WriteLine and not just Write. WriteLine adds a new line to the output.

This concludes the tutorial for classwork 3.