**1050 Programming Logic**

Lab 2 (20 points total)

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*Complete the following exercises. Enter your answers directly into this Word document. When completed, submit the Word document to Blackboard. For the programming exercise, please copy/paste your code into this document with a screenshot of the program executing. Note: you may have to refer back to Chapter 3 for some of the problems.*

1. Using figure 3.18 (see below), create a program that allows input of two integers. Output the product. (4 points)

Code:

int number1;

int number2;

int sum;

Console.Write("Enter first number");

number1 = Convert.ToInt32(Console.ReadLine());

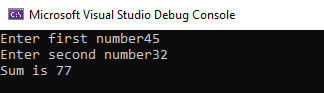
Console.Write("Enter second number");

number2 = Convert.ToInt32(Console.ReadLine());

sum = number1 + number2;

Console.WriteLine("Sum is {0}", sum);

Execution:



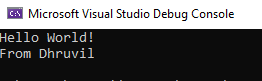
1. Add a single Console.WriteLine statement that outputs the following. Use Figure 3.17 (see below) (3 points)

Hello World!  
From [Your Name]

Code:

Console.WriteLine( "Hello World!\nFrom Dhruvil" );

Execution:



1. Add an output statement that outputs the following. Note: there is a tab between the two phrases (3 points)  
   Hello World! From [Your Name]

Code:

Console.WriteLine( "Hello World!\tFrom Dhruvil" );

Execution:



1. Answer the following with short answers (10 points, 2 points each):
   1. At what point in the program does our C# Console Application execution?

Ans: The program executes after the declaration of the class.

* 1. What is the difference between an integer type variable and a double / floating-point variable?

Ans: Integer variables have values that are either positive or negative while double/floating point variables are values that are more precise and have decimal points.

* 1. We can create blocks of code that we can call by name using a method. Give an example of a method from Chapter 4.

Ans: Example - Main

* 1. Like we have types double and int, we can create our own custom types using Classes. Each class has variables called instance variables or class members. To read the value of an instance variable, we create method called a get accessor. To assign a value ton instance variable, we use a method called a set accessor.
  2. What is the difference between a class and an object? How many instances of a class can we create (please explain your answer)?

Ans: The difference between a class and an object is that a class is a blueprint for creating various instances whereas an object is an instance of a class. A class has to be declared only once whereas an object can be declared several times.

