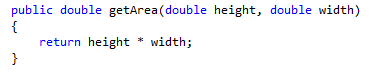
**1050 Programming Logic**Lab 5 (23 points total)

Name: \_\_\_\_Dhruvil Patel\_\_\_\_\_\_\_\_

1. **Identify and describe the following elements of the method header given the following method called getArea(). You must identify where they are in the method header example, other possible values and what the significance of each is (what does it mean?) (12 points – 2 points each)**



1. **Scope**

**Ans. Public is the scope in this example. Tells the code to access any restrictions. Public scope does not have any restrictions. Private scope has restrictions.**

1. **Static vs. Non-Static**

**Ans. In this case, it is non-static. If it is static, you can access information all across the code. If not, then it must find another way to get information.**

1. **Return Type**

**Ans. Double is the return type in this example. It indicates how the program will return information.**

1. **Method Name (Identifier)**

**Ans. getArea is the method name in this example. It tells the code where to fetch information.**

1. **Parameters**

**Ans. Double height, double width are the parameters in this case. Anything within the parenthesis is a parameter.**

1. **Method Body**

**Ans. return height\*width is the method body in this example. It marks the area of code to be executed.**

1. **Explain the difference between a user-defined method and a method that is provided with a framework. What should we consider when creating a user-defined method? (3 points)**

**Ans. User-defined methods are methods that are written by the user and are hidden from other methods. Methods provided by the framework are meaningful methods that can be reused from various locations in an app. When creating user-defined methods, we should consider, “Don’t Reinvent the Wheel” which means we should consider using methods provided by framework rather than user-defined methods.**

1. **Discuss the difference between a static and non-static method (2 points)**

**Ans. A static method is restricted from using any objects in the non-static fields. A non-static method has access to all the objects in the non-static fields.**

1. **Use the attached code. Note: you will have to extract the code and open it in Visual Studio before starting. Add a method to the Dog class called bark(). It should have the following characteristics: (3 points)**
   1. Zero parameters
   2. No return value
   3. Should execute Console.WriteLine("{0} is Barking...", name);

Ans: Code:

public void Bark()

{

Console.WriteLine("{0} is Barking...", Name);

}

1. **Add a method to the Dog class called doTrick(). It should have the following characteristics: (3 points)**

* Should accept a single string parameter called trickName
* No return value
* Should execute:

Console.WriteLine("{0} is so smart! {0} is doing a {1}", Name, trickName);

Ans. Code:

public void doTrick(string trickName)

{

Console.WriteLine("{0} is so smart! {0} is doing a {1}", Name, trickName);

}