Methods

**1) What is a method?**

- A method is a named sequence of events. It has a name and body that contains the actual statements to be run when the method is called. Methods can also be given some data for processing and can return information, which is usually the result of the processing.

**2) What does a return statement do?**

- A return statement is a declaration that tells a method that you want to return a value.

**3) What is an expression bodied method?**

- An expression-bodied method is a simplified form of a method that comprises a single expression. They operate just like any other method in that they can still take parameters and return values.

**4) What is the scope of a variable?**

- The scope of a variable is the region of a program in which that variable is usable.

**5) What is an overload method?**

- An overload method is the ability to redefine a function in more than one form. Overloading is accomplished by defining two or more functions in a class that share the same name. C# will be able to distinguish the methods with different method signatures. For example, the methods can have the same name but with different parameter lists within the same class.

**6) How do you call a method that requires arguments? Give a code example.**

- When you call a method that requires an argument, you must supply the information requested in the command. There must be an argument for each parameter and the value of each argument must be compatible with the type of its corresponding parameter. If the method you’re calling has two or more parameters, you must separate the arguments with commas. A code example is:

Int num1 = 10;

Int product1 = Square(num1);

**7) How do you write a method, that is, specify the method definition that requires a parameter list? Give a code example.**

- You can write a method that requires a parameter list by calling the method and placing the parameter list inside the parenthesis. A code example is:

student(string fname, string lname, int age = 21, string course = “MSSA”)

**8) How do you specify a parameter as an optional when defining a method? Give a code example.**

- When defining a method, you can specify a parameter as optional by providing a default value for that parameter through the use of the assignment operator. A code example is:

void optMethod(int first, double second = 0.0, string third = “Hello”);

{….

}

In the code example both the parameters “second” and “third” are optional since they have been assigned a value.

**9) How do you pass an argument to a method as a needed parameter? Give a code example.**

- You can pass an argument to a method as a needed parameter by specifying it by name followed by a colon and then the value to use. A code example of this is:

optMethod(first : 99, second : 123.45, third : “World”);