C# Programming Homework 03

Chapter 03, C# Step by Step

Readings

Read chapter 3 in the C# Step by Step book.

Discussion Questions

Answer the discussion questions in writing for chapter 3.

1. What is a method?

A named sequence of statements. Is a named block of code.

1. (Not in book) What is the difference between a function and a procedure/subprocedure/subroutine?

A function is used to calculate a result using given inputs. A procedure is used to perform a certain task in order. A function can be called by a procedure, but a procedure cannot be called by a function.

1. What does a return statement do?

An expression that specifies the returned value and a semicolon.

1. What is an expression bodied method?

It returns a value whose type matches the method’s return type.

1. What is the scope of a variable?

It is a region of code that indicates where the variables are being accessed.

1. What is an overloaded method?

When two methods have the same name and are declared in the same scope.

1. How do you call a method that requires arguments?

Method name followed by the parameter list

1. How do you write a method, that is, specify the method definition, that requires a parameter list?

Returntype, methodname, parameterlist, and the body

1. How do you specify a parameter as optional when defining a method?

When you provide a default value for the parameter

1. How do you pass an argument to a method as a named parameter?

You specify the name of the parameter, followed by a colon and the value to use

11. How do you return values from a method? Can you return multiple values from a method, and if so,

how?

With the return statement. Yes, you indicate that the method returns a tuple.

12. What is a tuple? How do you dene a method that returns multiple values? Give an example of a

method that returns multiple values other than the example in the book.

A small collection of values

13. Examine the method definition on page 83 of the book. Desk check the execution of this method.

What do you discover? This is called recursion.

1 long factorial ( int dataValue )

2 f

3 if ( dataValue == 1)

4 return 1 ;

5 else

6 return dataValue \* factorial ( dataValue - 1) ;

7 g

The recursion is when a method calls itself.

14. How does the compiler resolve an ambiguity between named arguments and optional parameters?

They have different parameter lists

15. The book states: \A key feature of C# and other languages designed for the .NET Framework is the

ability to interoperate with applications and components written with other technologies." What is

the COM and how is the CLR dependent on the COM?

Component object model is an object-oriented system for creating binary software components that can interact. CLR uses the COMs functionality to enable you to write code.