C# Programming Homework 08

Chapter 08, C# Step by Step

Readings

Read chapter 8 in the C# Step by Step book.

Discussion Questions

Answer the discussion questions in writing.

1. What is the difference between deep copy and shallow copy?

A shallow copy makes a new object and inserts references to the original and a deep copy makes a new object and inserts copies of objects found in the original.

1. What is the value of a reference after you declare and initialize it?

The value in the heap that the reference refers to

1. How do you declare a value type?

By using the reserved keyword

1. How do you declare a reference type?

By creating a new instance

1. Does C# allow you to assign NULL to a value type?

It depends

1. Can you assign a nullable value type to a non-nullable variable of the same type? Why or why not?

No

1. What is the difference between the stack and the heap?

Stack is a linear data structure and Heap is a hierarchical structure.

1. What does it mean when we say that all classes are specialized types?

A type in a different class does different things

1. What does ref do?

Indicates that a value that is passed by reference

1. What does out do?

Another way to return values through the method

1. Describe boxing and unboxing in your own words.

Boxing turns a value type into a reference type and reverse for unboxing

1. What does cast do?

Converts between types