CSCI 605 Homework 8

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Contents

0.1 Question 1

a) public static <T extends Comparable<? super T>> void sort(List<T> list)

Declare a publicly accessible method called **sort** that accepts a List storing Objects of a type that can be compared to the generic type T or its super classes *[list]*. This function returns nothing.

b) public static <T> void sort(List<T> list, Comparator<? super T> c)

Declare a publicly accessible method called **sort** that accepts a list of Objects of the generic type T *[list]* and an Object that can be used to compare two other objects of type T to each other *[c]*. This function returns nothing.

c) public static <T> int binarySearch(List<? extends Comparable<? super T>> list, T key)

Declare a publicly accessible method called **binarySearch** that accepts a List of Objects that can be compared to another object of type T (or any of its super classes) *[list]*, as well as a value of type T *[key]*. This function returns an integer.

d) public static void shuffle(List<?> list)

Declare a publicly accessible method called **shuffle** that accepts a List storing objects of an unspecified type *[list]*. This function returns nothing.

e) public static <T> void copy(List<? super T> dest, List<? extends T> src)

Declare a publicly accessible method called **copy** that accepts a List storing objects of the type T (or any of its super classes) *[dest]* and a second List storing objects of the type T (or any of its subclasses) *[src]*. This function returns nothing.

** These methods are all declared as **static**, which means that they are stored in memory at compile time [static initialisation], and can therefore be called without creating an instance of the type to which they belong. (e.g. *MyClass.sort(list)* as opposed to *MyObject.sort(list)*)