homework 7

Tuesday, October 6, 2020 2:54 PM

hw 7.1

1. my address class is the same as LP class;
2. read Collection, ArrayList;
3. read Collection.sort() description;
4. figure out sorting rules;
5. Your program should compile, without warnings, with the provided Test.java program.
6. You must be able to sort the storage space used with Collections.sort(aListOfAddresses).

hw 7.2

1. implement binary search tree;
2. delete(): use which ? == or equals();
3. no restrictions on what could be put in the BSF;
4. 存String，Integer，LP，Address；
5. 不能使用ArrayList；

6. SortedStorage 要求：
   1） 能存NULL，并指示现在储存了NULL了么；

7. 以下代码删除哪个 “1”?

```
aStorageInterfaceString.add("1");
aStorageInterfaceString.add("1");
aStorageInterfaceString.add(new String("1"));
aStorageInterfaceString.delete(new String("1"));
aStorageInterfaceString.delete("1");
```

Solution: 先检查 == ，没有再检查equals，但找到都只删除一次；

8. 可以多次添加同一个对象；
9. 必须添加NULL多于1次，加入都少个删除多个NULL；规定null比任何对象都小，只能等于自己，也就是说null节点一定存储在tree的最左端；同时相等的元素都添加到右子树上面；
10. 插入元素时就需要排序，不能插入以后再排序；（还需要解释为什么）
11. 需要有test class；
12. 不能使用@SuppressWarnings("unchecked")；
13. 使用 -Xlint 消除所有警告；
14. 不能使用课程以外的知识；

@fengkeyleaf

Java 集合框架
https://www.runoob.com/java/java-collections.html

Class Collections
https://www.runoob.com/manual/jdk11api/java.base/java/util/Collection.html
https://docs.oracle.com/en/java/javase/14/docs/api/java.base/java/util/Collections.html

Java ArrayList
https://www.runoob.com/java/java-arraylist.html
https://www.runoob.com/manual/jdk11api/java.base/java/util/ArrayList.html
https://docs.oracle.com/en/java/javase/14/docs/api/java.base/java/util/ArrayList.html

Interface Comparator<T>
https://docs.oracle.com/en/java/javase/14/docs/api/java.base/java/util/Comparator.html

Interface Comparable<T>
https://docs.oracle.com/en/java/javase/14/docs/api/java.base/java/lang/Comparable.html

Compares this object with the specified object for order. Returns a negative integer, zero, or a positive integer as this object is less than, equal to, or greater than the specified object.

二叉排序树（BST查找、插入、删除、遍历）——基于树的查找（一）
https://blog.csdn.net/weixin_39651041/article/details/80022177

class Node<F>:
https://www.cs.rit.edu/~hpb/Lectures/2201/605/605-145.html

A Binary Search Tree
https://www.cs.rit.edu/~hpb/Lectures/2201/605/605-135.html