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Test Name:	**INFO 6205 Spring 2019 Section_5 Quiz_06**
Taken On:	19 Feb 2019 16:30:25 EST
Time Taken:	29 min 37 sec/ 30 min
Work Experience:	< 1 years
Invited by:	Robin
Invited on:	19 Feb 2019 16:28:04 EST
Tags Score:	

100%

50/50

scored in **INFO 6205 Spring 2019 Section_5 Quiz_06** in 29 min 37 sec on 19 Feb 2019 16:30:25 EST

Recruiter/Team Comments:

No Comments.

	Question Description	Time Taken	Score	Status
Q1	Sorting > **Multiple Choice**	46 sec	5/ 5	✓
Q2	Polymorphism > **Multiple Choice**	8 min 46 sec	5/ 5	✓
Q3	Sorting > **Multiple Choice**	1 min 4 sec	5/ 5	✓
Q4	Sorting > **Multiple Choice**	36 sec	5/ 5	✓
Q5	Implementation > **Coding**	16 min 40 sec	30/ 30	✓

QUESTION 1

Correct Answer

Score 5

Sorting › Multiple Choice

QUESTION DESCRIPTION

Given an array in reverse order [6, 5, 4, 3, 2, 1], what are the steps in selection sort?

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- [x] 1 5 4 3 2 6, 1 2 4 3 5 6, 1 2 3 4 5 6
- [ ] 3 5 4 6 2 1, 3 2 4 6 5 1, 3 2 1 6 5 4, 1 2 3 4 5 6
- [ ] 5 6 4 3 2 1, 4 5 6 3 2 1, 3 4 5 6 2 1, 2 3 4 5 6 1, 1 2 3 4 5 6
- [ ] 6 5 4 3 1 2, 6 5 4 1 2 3, 6 5 1 2 3 4, 6 1 2 3 4 5, 1 2 3 4 5 6

No Comments

QUESTION 2

Correct Answer

Score 5

Polymorphism › Multiple Choice

QUESTION DESCRIPTION

What are the results of the following code snippet?

```
class A {

  int value = 1;
  int getValue(){
      return value;
  }
  String outPrint(){
      return "Class A";
  }
}

class B extends A{

   int value = 2;
   int getValue(){
       return value;
  }
   String outPrint(){

       return "Class B";
  }

}

class Test{

  public static void main(String[] args){
    A o = new B();
    System.out.println(o.getValue());
    System.out.println(o.outPrint());

  }


}
```

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- 1
- ✓ 2
- Class A
- ✓ Class B

No Comments

QUESTION 3

Correct Answer

Score 5

Sorting › Multiple Choice

QUESTION DESCRIPTION

As a developer of your company, you are asked to implement sorting method for processing business data.
If the input data are already sorted in ***most cases***, which one would you choose?

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- [x] Insertion Sort
- [ ] Selection Sort
- [ ] Merge Sort

No Comments

QUESTION 4

Correct Answer

Score 5

Sorting › Multiple Choice

QUESTION DESCRIPTION

As a developer of your company, you are asked to implement a sorting method for processing business data.
If the input data are ***random***, which one would you choose?

CANDIDATE ANSWER

Options: (Expected answer indicated with a tick)

- [ ] Insertion Sort
- [ ] Selection Sort
- [x] Merge Sort

No Comments

QUESTION 5

Correct Answer

Score 30

Implementation › Coding

QUESTION DESCRIPTION

(An anagram is a word or phrase formed by rearranging the letters of a different word or phrase, using all the original letters exactly once.)
Given two strings s and t, write a function to determine if t is an anagram of s.

For example,
s = "anagram", t = "nagaram", return true.
s = "rat", t = "car", return false.

Note:
You may assume the string contains only lowercase alphabets.

Hint:

1. There is **O**(n) solution for this question but your algorithm doesn't have to be **O**(n) as long as you can pass the test cases.
2. You may find *toCharArray()* and *charAt()* methods in String Class useful.
3. You may sort the characters in the given Strings to solve this problem.

CANDIDATE ANSWER

Language used: **Java 8**

```
public static boolean isAnagram(String s, String t) {
        // put your implementation here

        char[] sCh = s.toCharArray();
        char[] tCh = t.toCharArray();

        if(sCh.length!=tCh.length){
            return false;
        }

        sort(sCh);
        sort(tCh);

        for(int i = 0;i<sCh.length;i++){
            if(sCh[i]!=tCh[i]){
                return false;
            }
        }

        return true;

    }

    public static void sort(char[] c){
        int N = c.length;
        for(int i = 0;i<N;i++){
            int min = i;
            for(int j = i+1;j<N;j++){
                if(c[j]<c[min]){
                    min = j;
                }
            }

            char temp = c[i];
            c[i] = c[min];
            c[min] = temp;
        }
    }
```

TESTCASE	DIFFICULTY	STATUS	SCORE	TIME TAKEN	MEMORY USED
TestCase 0	Easy	Success	5	0.15 sec	25.6 MB
TestCase 1	Easy	Success	5	0.16 sec	25.8 MB
TestCase 2	Easy	Success	5	0.15 sec	26 MB
TestCase 3	Easy	Success	5	0.15 sec	25.6 MB

TestCase 4	Easy	Success	5	0.15 sec	25.8 MB
TestCase 5	Easy	Success	5	0.15 sec	25.8 MB

No Comments

PDF generated at: 19 Feb 2019 22:00:56 UTC