

Homework Turnin

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Section: 6G
Course: TJHSST APCS 2016-17
Assignment: 08-02
Receipt ID: fecaf57e2e3905c16ee67292fb0b7996

Turnin Successful!

The following file(s) were received:

SetsOfLetters.java (3151 bytes)

```
1. // Name:   Date:
2. import java.util.*;
3. import java.io.*;
4. public class SetsOfLetters
5. {
6.     public static void main(String[] args) throws FileNotFoundException
7.     {
8.         //Scanner sc = new Scanner(System.in);
9.         //System.out.print("Enter the file name: ");
10.        //String fileName = sc.next();
11.        String fileName = "declarationLast.txt";
12.        fillTheSets(fileName);
13.    }
14.    public static void fillTheSets(String fn) throws FileNotFoundException
15.    {
16.        Scanner infile = new Scanner(new File(fn));
17.        Set<String> commonLower = new HashSet<String>();
18.        Set<String> commonUpper = new HashSet<String>();
19.        Set<String> commonOther = new HashSet<String>();
20.        boolean bool = true;
21.
22.        while(infile.hasNextLine())
23.        {
24.            String str = infile.nextLine();
25.            System.out.println(str);
26.            Set<String> setLower = new HashSet<String>();
27.            Set<String> setUpper = new HashSet<String>();
28.            Set<String> setOther = new HashSet<String>();
29.
30.            for(Character c: str.toCharArray())
31.            {
32.                if(!Character.isLetter(c))
33.                    setOther.add(c+"");
34.                else if(Character.isLowerCase(c))
35.                    setLower.add(c+"");
36.                else
37.                    setUpper.add(c+"");
38.            }
39.
40.            Set<String> setLower2 = new TreeSet<String>(setLower);
41.            Set<String> setUpper2 = new TreeSet<String>(setUpper);
42.            Set<String> setOther2 = new TreeSet<String>(setOther);
43.
44.            System.out.print("Lower Case: ");
45.            System.out.print(setLower2);
46.            System.out.print("\nUpper Case: ");
47.            System.out.print(setUpper2);
48.            System.out.print("\nOther: ");
49.            System.out.print(setOther2);
50.            System.out.println("\n");
```

```
51.
52.     if(bool)
53.     {
54.         commonLower = setLower;
55.         commonUpper = setUpper;
56.         commonOther = setOther;
57.         bool = false;
58.     }
59.     else
60.     {
61.         commonLower = common(setLower, commonLower);
62.         commonUpper = common(setUpper, commonUpper);
63.         commonOther = common(setOther, commonOther);
64.     }
65. }
66.
67. Set<String> commonLower2 = new TreeSet<String>(commonLower);
68. Set<String> commonUpper2 = new TreeSet<String>(commonUpper);
69. Set<String> commonOther2 = new TreeSet<String>(commonOther);
70.
71. System.out.print("Common Lower Case: ");
72. System.out.print(commonLower2);
73. System.out.print("\n Common Upper Case: ");
74. System.out.print(commonUpper2);
75. System.out.print("\n Common Other: ");
76. System.out.print(commonOther2);
77. }
78. private static Set<String> common(Set<String> s, Set<String> c)
79. {
80.     ArrayList<String> toDelete = new ArrayList<String>();
81.     Iterator<String> it = c.iterator();
82.     while(it.hasNext())
83.     {
84.         String temp = it.next();
85.         if(!s.contains(temp))
86.             toDelete.add(temp);
87.     }
88.     for(String x: toDelete)
89.         c.remove(x);
90.     return c;
91. }
92. }
```