IRC_SKCT_Java2_SB_COD_Stream

Test Summary

- No. of Sections: 1
- No. of Questions: 5
- Total Duration: 120 min

Section 1 - Coding

Section Summary

- No. of Questions: 5
- Duration: 120 min

Additional Instructions:

None

Q1. Helen is having a list of integers, your task is to help her find the maximum value element present in the list using Stream functions

Input Format

First line of input has the number of Integers(N) that will be given to Helen
Second Line has the first integer value
Third Line has the second Integer value and so on upto N

Output Format

Maximum number from all the integers

Sample Input

```
3
546
546
12
```

Sample Output

```
546
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q2. Given a list of integers, find the total number of elements present in the list using Stream functions

Input Format

First Line has the number of integer(N)
Following lines has N values

Output Format

Total number of elements that is stored in the List

Sample Input

```
3
123
466
899
```

Sample Output

```
3
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q3. Vikram is to find duplicate elements in each integers list in java using Stream functions. Help him pick only the duplicate elements from the list.

Input Format

First Line has the Integer N(number of elements)
Followed by the N integer values

Output Format

First Integer Value of the given elements

Sample Input

Sample Output

3 45 41 45	45

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q4. Athiyan is having a list of integers, your task is to help him find out all the numbers starting with 1 using Stream functions

Input Format

First Line has a Integer N
Followed by N values to be processed

Output Format

Integer Values starting with 1

Sample Input

4 12 23 14

Sample Output

12 14 12

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q5. Sakthivel is supposed to filter out all the words that exceed n letters, then sum up the lengths of all such words exceeding n letters

Input Format

First line of input has the number of words given(M)
Second line has all the M words
Third Line has the value of n

Output Format

Sum of length of words exceeding n

Sample Input

3 Gokul Sam Prasath 4

Sample Output

12

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Answer Key & Solution

Section 1 - Coding

Q1

Test Case

Input

```
5
1
2
3
```

Output

```
5
```

Weightage - 25

Input

```
6
78
98
45
```

Output

```
98
```

Weightage - 25

Input

```
3
45687
54689
12345
```

Output

```
54689
```

Weightage - 25

Input

```
2
900000
900001
```

Output

```
900001
```

Weightage - 25

Sample Input

```
3
546
546
12
```

Sample Output

```
546
```

Solution

```
import java.util.ArrayList;
import java.util.List;
import java.util.Scanner;

class main {

    public static void main(String[] args) {
        List<Integer> arList = new ArrayList<Integer>();
        Scanner sc=new Scanner(System.in);
        int num=sc.nextInt();
        for(int i=0;i<num;i++)
        {
            arList.add(sc.nextInt());
        }
```

```
        int max =  arList.stream()
                        .max(Integer::compare)
                        .get();
        System.out.println(max);
    }

}
```

Q2

Test Case

Input

```
5
123
456
789
```

Output

```
5
```

Weightage - 25

Input

```
7
1
2
3
```

Output

```
7
```

Weightage - 25

Input

```
4
654
654
654
```

Output

```
4
```

Weightage - 25

Input

```
9
12
21
23
```

Output

```
9
```

Weightage - 25

Sample Input

```
3
123
466
899
```

Sample Output

```
3
```

Solution

```
import java.util.ArrayList;
import java.util.List;
import java.util.Scanner;

class main {
    public static void main(String[] args) {
        List<Integer> arList = new ArrayList<Integer>();
        Scanner sc=new Scanner(System.in);
        int num=sc.nextInt();
```

```
        for(int i=0;i<num;i++)
        {
            arList.add(sc.nextInt());
        }
        long count =  arList.stream()
                      .count();
        System.out.println(count);
    }
}
```

Q3

Test Case

Input

```
5
45
54
45
```

Output

```
45
```

Weightage - 25

Input

```
6
54
65
54
```

Output

```
54
65
23
```

Weightage - 25

Input

```
2
895
895
```

Output

```
895
```

Weightage - 25

Input

```
8
45
65
12
```

Output

```
65
12
```

Weightage - 25

Sample Input

```
3
45
41
45
```

Sample Output

```
45
```

Solution

```
import java.util.ArrayList;
import java.util.HashSet;
import java.util.List;
import java.util.Scanner;
import java.util.Set;

class main{
```

```
    public static void main(String args[]) {
        List<Integer> arList = new ArrayList<Integer>();
        Set<Integer> set = new HashSet<Integer>();
        Scanner sc=new Scanner(System.in);
        int num=sc.nextInt();
        for(int i=0;i<num;i++)
        {
            arList.add(sc.nextInt());
        }
        arList.stream()
              .filter(n -> !set.add(n))
              .forEach(System.out::println);
    }
}
```

Q4

Test Case

Input

```
5
54
65
12
```

Output

```
12
```

Weightage - 25

Input

```
3
12
12
12
```

Output

```
12
12
12
```

Weightage - 25

Input

```
6
12
13
45
```

Output

```
12
13
```

Weightage - 25

Input

```
2
1
1
```

Output

```
1
1
```

Weightage - 25

Sample Input

```
4
12
23
14
```

Sample Output

```
12
14
12
```

Solution

```
import java.util.ArrayList;
import java.util.List;
```

```
import java.util.Scanner;

class main {
    public static void main(String[] args) {
        List<Integer> arList = new ArrayList<Integer>();
        Scanner sc=new Scanner(System.in);
        int num=sc.nextInt();
        for(int i=0;i<num;i++)
        {
            arList.add(sc.nextInt());
        }
        arList.stream()
              .map(s -> s + "") // Convert integer to String
              .filter(s -> s.startsWith("1"))
              .forEach(System.out::println);
    }
}
```

Q5

Test Case

Input

```
3
Kouthish Sus Sakthi
3
```

Output

```
14
```

Weightage - 25

Input

```
5
world is not enough 007
4
```

Output

```
11
```

Weightage - 25

Input

```
2
Vikram Karnan
5
```

Output

```
12
```

Weightage - 25

Input

```
4
hi! how are you
3
```

Output

```
0
```

Weightage - 25

Sample Input

```
3
Gokul Sam Prasath
4
```

Sample Output

```
12
```

Solution

```java
import java.util.ArrayList;
import java.util.List;
import java.util.Scanner;

class main {

    public static void main(String[] args) {
        List<String> arList = new ArrayList<String>();
        Scanner sc=new Scanner(System.in);
        int num=sc.nextInt();
        for(int i=0;i<num;i++)
        {
            arList.add(sc.next());
        }
        int n=sc.nextInt();
        int ans=arList.stream()
                      .filter(s -> s.length() > n)
                      .mapToInt(s -> s.length())
                      .sum();
        System.out.println(ans);
    }
}
```