Rajalakshmi Engineering College

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Batch: 2028
Degree: B.E - AI & ML

Scan to verify results

2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 4_Q3

Attempt : 1
Total Mark : 10
Marks Obtained : 10

Section 1 : Coding

1. Problem Statement

Bechan Chacha is seeking help to filter out valid mobile numbers from a list provided by his crush. He can only pick his crush's number if the list contains valid mobile numbers.

A mobile number is considered valid if:

It has exactly 10 digits.It consists only of numeric values (0−9).It does not begin with zero.

Your task is to determine whether each mobile number in the list is valid or not.

Input Format

The first line contains an integer T, representing the number of mobile numbers

to check.

The next T lines each contain a string S, representing a mobile number.

Output Format

For each mobile number S, the output print "YES" if it is valid.

Otherwise, print "NO".

Refer to the sample output for formatting specifications.

Sample Test Case

Input: 1
9876543210
Output: YES

Answer

```java
import java.util.Scanner;

class MobileNumberValidator {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int T = scanner.nextInt();
        scanner.nextLine();

        for (int i = 0; i < T; i++) {
            String mobileNumber = scanner.nextLine().trim();
            if (isValidMobileNumber(mobileNumber)) {
                System.out.println("YES");
            } else {
                System.out.println("NO");
            }
        }

        scanner.close();
    }

    private static boolean isValidMobileNumber(String mobileNumber) {
        if (mobileNumber.length() != 10) {
```

```
        return false;
    }

    return mobileNumber.matches("[1-9][0-9]{9}");
    }
}
```

Status : Correct   *Marks : 10/10*

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2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 4_Q2

Attempt : 1
Total Mark : 10
Marks Obtained : 10

Section 1 : Coding

1. Problem Statement

Anu is developing a tool for a conference registration system. Participants submit keywords related to their fields of interest. The organizer wants to sort these keywords alphabetically to generate tags for session grouping.

Write a program that accepts at least five keywords as input arguments and outputs them in sorted alphabetical order.

Input Format

The first line of input contains an integer n, representing the number of keywords.

The second line of input contains n space-separated keywords (string).

Output Format

The output prints n space separated strings representing the sorted keyword in alphabetical order.

Refer to the sample output for formatting specifications.

Sample Test Case

Input: 5
Blockchain Cloud AI Data Cybersecurity
Output: AI Blockchain Cloud Cybersecurity Data

Answer

```java
import java.util.Arrays;
import java.util.Scanner;

class KeywordSorter {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);


        int n = scanner.nextInt();
        scanner.nextLine();


        String keywordsLine = scanner.nextLine();
        String[] keywords = keywordsLine.split(" ");


        Arrays.sort(keywords);


        System.out.println(String.join(" ", keywords));

        scanner.close();
    }
}
```

Status : Correct   *Marks : 10/10*

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2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 4_Q2

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Status : Correct   *Marks : 10/10*

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REC_2028_OOPS using Java_Week 4_MCQ

Attempt : 1
Total Mark : 15
Marks Obtained : 14

Section 1 : MCQ

1. Predict the output for the following code:

```java
public class Main {
    public static void main(String[] args) {
        float a = 10.0f;
        String temp = Float.toString(a);
        System.out.println(temp);
    }
}
```

Answer

10.0

Status : Correct   *Marks : 1/1*

2. What will be the output of the following program?

```java
class Main {
    public static void main(String[] args) {
        String s = new String("5");
        System.out.println(1 + 1111 + s + 1 + 1010);
    }
}
```

Answer

1112511010

Status : Correct   *Marks : 1/1*

3. What will be the output of the following code?

```java
class Main {
    public static void main(String args[]) {
        String s1 = "Hello i love java";
        String s2 = new String(s1);
        System.out.println((s1 == s2) + " " + s1.equals(s2));
    }
}
```

Answer

false true

Status : Correct   *Marks : 1/1*

4. What will be the output of the following program?

```java
public class Main {
    public static void main(String[] args) {
        String str = "1234.34";
        int a = Integer.parseInt(str);
        System.out.println(a);
    }
}
```

Answer

NumberFormatException

Status : Correct   *Marks : 1/1*

5. What will be the output of the following program?

```
class Main {
   public static void main(String[] args) {
      String s1 = "EDUCATION";
      String s2 = new String("EDUCATION");
      String s3 = "EDUCATION";
      if (s1 == s2) {
         System.out.println("s1 and s2 equal");
      }
      else {
         System.out.println("s1 and s2 not equal");
      }
      if (s1 == s3) {
         System.out.println("s1 and s3 equal");
      }
      else {
         System.out.println("s1 and s3 not equal");
      }
   }
}
```

Answer

s1 and s2 not equals1 and s3 equal

Status : Correct   *Marks : 1/1*

6. What is the output of the following code?

```
class Main
{
   public static void main(String args[])
   {
```

```
        StringBuffer c = new StringBuffer("Hello");
        c.delete(0,2);
        System.out.println(c);
    }
}
```

Answer

llo

Status : Correct   *Marks : 1/1*

7. What will be the output of the following code?

```
class Main {
    public static void main(String args[])
    {
        StringBuffer sb = new StringBuffer("Hello");
        System.out.println("buffer before = " + sb);
        System.out.println("charAt(1) before = " + sb.charAt(1));
        sb.setCharAt(1, 'i');
        sb.setLength(2);
        System.out.println("buffer after = " + sb);
        System.out.println("charAt(1) after = " + sb.charAt(1));
    }
}
```

Answer

buffer before = HellocharAt(1) before = ebuffer after = HicharAt(1) after = i

Status : Correct   *Marks : 1/1*

8. What will be the output of the following program?

```
class Main {
    public static void main(String args[])  {
        String name="Work Hard";
        name.concat("Success");
        System.out.println(name);
    }
```

}

Answer

Work Hard

Status : Correct   *Marks : 1/1*

9. What will be the output of the following code?

```
class Main {
    public static void main(String args[]) {
        char c[] = {'j', 'a', 'v', 'a'};
        String s1 = new String(c);
        String s2 = new String(s1);
        System.out.println(s1);
        System.out.println(s2);
    }
}
```

Answer

java java

Status : Wrong   *Marks : 0/1*

10. Predict the output for the following code.

```
public class Main {
    public static void main(String[] args) {
        String a = "java";
        char temp = a.charAt(1);
        System.out.println(temp);
    }
}
```

Answer

a

Status : Correct   *Marks : 1/1*

11. What will be the output of the following program?

```java
class Main {
  public static void main(String[] args) {
    String greet = "Welcome\n";
    System.out.print("String: " + greet);
    int length = greet.length();
    System.out.print("Length: " + length);
  }
}
```

Answer

String: WelcomeLength: 8

Status : Correct   *Marks : 1/1*

12. What will be the output of the following program?

```java
class Main {
    public static void main(String args[]) {
        StringBuffer sb = new StringBuffer("Hello");
        System.out.println("buffer = " + sb);
        System.out.println("length = " + sb.length());
        System.out.println("capacity = " + sb.capacity());
    }
}
```

Answer

buffer = Hellolength = 5capacity = 21

Status : Correct   *Marks : 1/1*

13. What will be the output for the following code?

```java
class Main {
    public static void main(String[] args) {
    String languages[] = { "C", "C++", "Java", "Python", "Ruby"};
        for (String sample: languages) {
            System.out.println(sample);
```

```
        }
      }
    }
```

Answer

CC++JavaPythonRuby

Status : Correct   *Marks : 1/1*

14. Predict the output for the following code.

```
class Main {
    public static void main(String[] fruits) {
        String fruit1 = new String("apple");
        String fruit2 = new String("orange");
        String fruit3 = new String("pear");
        fruit3 = fruit1;
        fruit2 = fruit3;
        fruit1 = fruit2;
        System.out.println(fruit1);
        System.out.println(fruit2);
        System.out.println(fruit3);
    }
}
```

Answer

appleappleapple

Status : Correct   *Marks : 1/1*

15. Predict the output for the following code:

```
class Main {
    public static void main(String args[]) {
        StringBuffer sb = new StringBuffer("I Java!");
        sb.insert(5, "like ");
        System.out.println(sb);
    }
}
```

Answer

I Javlike a!

Status : Correct   ***Marks :*** *1/1*