

# Rajalakshmi Engineering College

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## 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**

```
// You are using Java
import java.util.*;

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

        // Read number of test cases
        int T = sc.nextInt();
        sc.nextLine(); // consume newline

        for (int i = 0; i < T; i++) {
            String number = sc.nextLine().trim();

            // Check validity
            if (isValidMobile(number)) {
                System.out.println("YES");
            } else {
                System.out.println("NO");
            }
        }
    }
}
```

```
        sc.close();  
    }  
  
    // Function to validate mobile number  
    private static boolean isValidMobile(String num) {  
        // Check length  
        if (num.length() != 10) {  
            return false;  
        }  
  
        // First digit must not be '0'  
        if (num.charAt(0) == '0') {  
            return false;  
        }  
  
        // Check all digits  
        for (char c : num.toCharArray()) {  
            if (!Character.isDigit(c)) {  
                return false;  
            }  
        }  
  
        return true; // passed all checks  
    }  
}
```

**Status : Correct**

**Marks : 10/10**