

Rajalakshmi Engineering College

Name: R.Mohana Shri

Email: 241801167@rajalakshmi.edu.in

Roll no: 241801167

Phone: 7305977564

Branch: REC

Department: AI & DS - Section 2

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Degree: B.E - AI & DS

Scan to verify results



2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 4_Q5

Attempt : 1

Total Mark : 10

Marks Obtained : 10

Section 1 : Coding

1. Problem Statement

In a secure banking system, customers are required to create PIN codes for accessing their accounts. The bank wants to validate these PIN codes before accepting them.

A PIN code is considered valid if:

It consists of exactly 4 digits. All characters must be numeric (0–9). It cannot contain all identical digits (e.g., 1111 is invalid).

Your task is to determine whether each PIN code in the list is valid or not.

Input Format

The first line of input contains an integer T, representing the number of PIN codes to check.

The next T lines each contain a string S, representing a PIN code.

Output Format

For each PIN code S, the output print "YES" if it is valid.

Otherwise, the output print "NO".

Refer to the sample output for formatting specifications.

Sample Test Case

Input: 1

1234

Output: YES

Answer

```
import java.util.Scanner;

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

        // Read number of test cases
        int T = Integer.parseInt(scanner.nextLine());

        for (int i = 0; i < T; i++) {
            String pin = scanner.nextLine();

            if (isValidPin(pin)) {
                System.out.println("YES");
            } else {
                System.out.println("NO");
            }
        }

        scanner.close();
    }

    // Helper method to validate a single PIN
```

```
private static boolean isValidPin(String pin) {  
    // Rule 1: Must be exactly 4 characters  
    if (pin.length() != 4) {  
        return false;  
    }  
  
    // Rule 2: All characters must be digits  
    for (char ch : pin.toCharArray()) {  
        if (!Character.isDigit(ch)) {  
            return false;  
        }  
    }  
  
    // Rule 3: Cannot contain all identical digits  
    char firstChar = pin.charAt(0);  
    boolean allSame = true;  
  
    for (int i = 1; i < 4; i++) {  
        if (pin.charAt(i) != firstChar) {  
            allSame = false;  
            break;  
        }  
    }  
  
    return !allSame;  
}
```

Status : Correct

Marks : 10/10