# Rajalakshmi Engineering College

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## 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**

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

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

        int T = sc.nextInt();  // number of PINs
        sc.nextLine(); // consume leftover newline

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

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

        sc.close();
    }
```

```java
// Function to check validity of a PIN code
public static boolean isValidPIN(String pin) {
    // Rule 1: Length must be exactly 4
    if (pin.length() != 4) return false;

    // Rule 2: Must be all digits
    for (int i = 0; i < 4; i++) {
        if (!Character.isDigit(pin.charAt(i))) {
            return false;
        }
    }

    // Rule 3: Not all identical digits
    char first = pin.charAt(0);
    boolean allSame = true;
    for (int i = 1; i < 4; i++) {
        if (pin.charAt(i) != first) {
            allSame = false;
            break;
        }
    }
    if (allSame) return false;

    return true;
    }
}
```

*Status :* Correct                                              *Marks : 10/10*