

# Rajalakshmi Engineering College

Name: Kiruthick SM

Email: 240701263@rajalakshmi.edu.in

Roll no: 240701263

Phone: 8122868914

Branch: REC

Department: CSE - Section 4

Batch: 2028

Degree: B.E - CSE

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## 2024\_28\_III\_OOPS Using Java Lab

### 2028\_REC\_OOPS using Java\_Week 2\_Q8

Attempt : 1

Total Mark : 10

Marks Obtained : 10

#### **Section 1 : Coding**

##### **1. Problem Statement**

A bank generates secure codes using 3-digit numbers where each digit is unique, and the code must be divisible by 3. You are tasked with generating the first N such codes based on user input, ensuring the digits are unique and the number is divisible by 3.

Note: Use nested for loops to solve.

##### ***Input Format***

The first line contains an integer N representing the number of valid codes to generate.

##### ***Output Format***

The output prints N lines, each line contains a valid 3-digit code.

Refer to the sample output for formatting specifications.

### **Sample Test Case**

Input: 5

Output: 102

105

108

120

123

### **Answer**

```
import java.util.Scanner;
class BankSecureCodes {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int N = sc.nextInt();

        int count = 0;

        for (int i = 1; i <= 9 && count < N; i++) {
            for (int j = 0; j <= 9 && count < N; j++) {
                if (j == i) continue;
                for (int k = 0; k <= 9 && count < N; k++) {
                    if (k == i || k == j) continue;

                    int num = i * 100 + j * 10 + k;
                    if (num % 3 == 0) {
                        System.out.println(num);
                        count++;
                        if (count == N) break;
                    }
                }
            }
        }
        sc.close();
    }
}
```

**Status : Correct**

**Marks : 10/10**