

# Rajalakshmi Engineering College

Name: Praveen Ramanan K  
Email: 241801214@rajalakshmi.edu.in  
Roll no: 241801214  
Phone: 6381056240  
Branch: REC  
Department: AI & DS - Section 3  
Batch: 2028  
Degree: B.E - AI & DS

Scan to verify results



## 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**

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

public class Main {
    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; i++) {
            for (int j = 0; j <= 9; j++) {
                for (int k = 0; k <= 9; k++) {
                    if (i != j && i != k && j != k) {
                        int num = i * 100 + j * 10 + k;
                        if (num % 3 == 0) {
                            System.out.println(num);
                            count++;
                            if (count == N) return;
                        }
                    }
                }
            }
        }
    }
}
```

Status : Correct

Marks : 10/10