

# Rajalakshmi Engineering College

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Batch: 2028

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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**

```
// You are using Java
import java.util.*;
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 && j!=k && k!=i){
                        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**