

# Rajalakshmi Engineering College

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Branch: REC

Department: AI & DS - Section 1

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***

```
import java.util.Scanner;
class main
{
    public static void main(String[] args)
    {
        Scanner sc=new Scanner(System.in);
        int a=sc.nextInt();
        int num=0;
        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)
                    {
                        num=i*100 + j*10 + k;
                        if(num%3==0)
                        {
                            System.out.printf("%d\n",num);
                            count++;
                        }
                        if(count==a)
                        {
                            return;
                        }
                    }
                }
            }
        }
    }
}
```

```
        } //break;
    }
}
System.out.println();
}
}
```

**Status : Correct**

**Marks : 10/10**