Rajalakshmi Engineering College

Name: R.Mohana Shri
Email: 241801167@rajalakshmi.edu.in
Roll no: 241801167
Phone: 7305977564
Branch: REC
Department: AI & DS - Section 2
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 line,s 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

```java
// 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**