Rajalakshmi Engineering College

Name: Prajith S
Email: 240701390@rajalakshmi.edu.in
Roll no:
Phone: 8610799150
Branch: REC
Department: CSE - Section 8
Batch: 2028
Degree: B.E - CSE

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.*;

class Main {
   public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      int N = sc.nextInt(), count = 0;

      for (int d1 = 1; d1 <= 9 && count < N; d1++) {
         for (int d2 = 0; d2 <= 9 && count < N; d2++) {
            for (int d3 = 0; d3 <= 9 && count < N; d3++) {
               if (d1 != d2 && d1 != d3 && d2 != d3) {
                  if ((d1 + d2 + d3) % 3 == 0) {
                     System.out.println("" + d1 + d2 + d3);
                     count++;
                     if (count == N) return;
                  }
               }
            }
         }
      }
   }
}
```

Status : Correct   *Marks : 10/10*