

Rajalakshmi Engineering College

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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;

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

        for (int h = 1; h <= 9; h++) {
            for (int t = 0; t <= 9; t++) {
                for (int u = 0; u <= 9; u++) {
                    if (h != t && h != u && t != u) {
                        int num = h * 100 + t * 10 + u;
                        if (num % 3 == 0) {
                            System.out.println(num);
                            count++;
                            if (count == N) {
                                return;
                            }
                        }
                    }
                }
            }
        }
    }
}
```

Status : Correct

Marks : 10/10