Rajalakshmi Engineering College

Name: Lakshmi Narayanan S
Email: 241801133@rajalakshmi.edu.in
Roll no: 241801133
Phone: 9345832054
Branch: REC
Department: AI & DS - Section 3
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
import java.util.*;
class Solution{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int count = 0,a = (int)Math.pow(10,2) +2;
        while(count != n){
            if(a % 3 != 0){
                a++;
                continue;
            }
            Map<Integer,Integer> map = new HashMap<>();
            int temp = a;
            while(a != 0){
                if(map.get(a%10) == null){
                    map.put(a%10,1);
                }
                else{
                    break;
                }
                a /= 10;
            }
            if(a == 0){
                count++;
                a = temp;
                System.out.println(a);
                a += 3;
```

```
            }
        else{
            a = temp;
            a++;
        }
    }
}
```

Status : Correct   *Marks : 10/10*