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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 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.Scanner;

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

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

    scanner.close();
  }
}
```

```
}
```

Status : Correct   *Marks : 10/10*