

# Rajalakshmi Engineering College

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Batch: 2028

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## 2024\_28\_III\_OOPS Using Java Lab

### 2028\_REC\_OOPS using Java\_Week 2\_Q5

Attempt : 1

Total Mark : 10

Marks Obtained : 10

#### Section 1 : Coding

##### 1. Problem Statement

Ted, the computer science enthusiast, has accepted the challenge of writing a program that checks if the number of digits in an integer matches the sum of its digits.

Guide Ted in designing and writing the code to solve this problem using a 'do-while' loop.

##### *Input Format*

The input consists of an integer N, representing the number to be checked.

##### *Output Format*

If the sum is equal to the number of digits, print "The number of digits in N matches the sum of its digits."

Else, print "The number of digits in N does not match the sum of its digits."

Refer to the sample output for formatting specifications.

### ***Sample Test Case***

Input: 20

Output: The number of digits in 20 matches the sum of its digits.

### ***Answer***

```
import java.util.Scanner;

class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int N = sc.nextInt();
        int temp = N;
        int digitCount = 0;
        int sum = 0;

        // do-while loop to process digits
        do {
            int digit = temp % 10; // last digit
            sum += digit; // add to sum
            digitCount++; // count digit
            temp /= 10; // remove last digit
        } while (temp > 0);

        if (digitCount == sum) {
            System.out.println("The number of digits in " + N + " matches the sum of its digits.");
        } else {
            System.out.println("The number of digits in " + N + " does not match the sum of its digits.");
        }
        sc.close();
    }
}
```

}

**Status : Correct**

**Marks : 10/10**