

# Rajalakshmi Engineering College

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Batch: 2028

Degree: B.E - CSE

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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***

```
// You are using Java
import java.util.Scanner;
class DigitSumChecker {

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

        int temp = N;
        int digitCount = 0;
        int digitSum = 0;

        // Use do-while loop to count digits and compute sum
        do {
            int digit = temp % 10;
            digitSum += digit;
            digitCount++;
            temp /= 10;
        } while (temp > 0);

        // Check and print the result
        if (digitSum == digitCount) {
            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**