Rajalakshmi Engineering College

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2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 1_Q3

Attempt : 1
Total Mark : 10
Marks Obtained : 10

Section 1 : Coding

1. Problem statement

Manoj, a developer at MoneyMatters Inc., is working on improving the company's financial system. He needs to create a program that takes an integer input, converts it into a double, and displays both the original integer and the converted double value.

Input Format

The input consists of a single integer representing a monetary amount.

Output Format

The first line of the output displays the "Original Integer: ", followed by an integer representation of the input value.

The second line displays the "Converted Double: ", followed by a double value representing the input as a decimal value.

Refer to the sample output for the formatting specifications.

Sample Test Case

Input: 20
Output: Original Integer: 20
Converted Double: 20.0

Answer

```
import java.util.Scanner;
class Main {
  public static void main(String args[]) {
      Scanner sc = new Scanner(System.in);
      int n = sc.nextInt();
      double nn = n;
      System.out.println("Original Integer: " + n);
      System.out.print("Converted Double: " + nn);
  }
}
```

Status : Correct   *Marks : 10/10*

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Scan to verify results

2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 1_Q4

Attempt : 1
Total Mark : 10
Marks Obtained : 10

Section 1 : Coding

1. Problem Statement

Vishal and Arun are discussing the properties of numbers. Vishal gives Arun two integers. He asks Arun to check if the sum of these two numbers is a multiple of their product.

Can you assist Arun and determine whether the sum is a multiple of the product?

Input Format

The input consists of two space-separated integers.

Output Format

The output prints:

1. "Sum is Multiple of Product" if the sum of the two numbers is divisible by their product.
2. "Sum is Not Multiple of Product" otherwise.

Refer to the sample output for formatting specifications.

Sample Test Case

Input: 1 2

Output: Sum is Not Multiple of Product

Answer

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

        int n1 = sc.nextInt();
        int n2 = sc.nextInt();
        int sum = n1 + n2;
        int prdt = n1 * n2;

        if (prdt % sum == 0) {
            System.out.print("Sum is Multiple of Product");
        } else {
            System.out.print("Sum is Not Multiple of Product");
        }
    }
}
```

Status : Correct   *Marks : 10/10*

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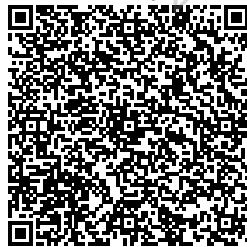Roll no: 241501131
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2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 1_Q6

Attempt : 1
Total Mark : 10
Marks Obtained : 10

Section 1 : Coding

1.   Problem Statement

Joey is learning about bitwise operations and is working on a project that involves extracting specific bits from integers. He needs to write a program that takes an integer and the number of bits N as input and outputs the value of the lowest N bits of the integer.

Help Joey in his project to understand and visualize how bitwise operations work in practical scenarios.

Input Format

The first line of input consists of an integer X, representing the given integer.

The second line consists of an integer N, representing the number of bits to extract.

Output Format

The output displays "Result: " followed by an integer representing the value of the lowest N bits of the given integer.

Refer to the sample output for formatting specifications.

Sample Test Case

Input: 85
2
Output: Result: 1

Answer

```java
import java.util.Scanner;
class Main {
    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        int x = sc.nextInt();
        int n = sc.nextInt();
        int mask = (1 << n) - 1;
        int bit = x & mask;

        System.out.print("Result: "+bit);
    }
}
```

Status : Correct   **Marks : 10/10**