**LAP2\_CONTOL STATEMENTS\_LOOPS\_FUNCTION\_ANP-C7281 AND ANP-C7374**

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**1.Calculate the sum of numbers from 1 to 10.**

**PROGRAM :**

sum\_numbers = sum(range(1, 11))

print("The sum of numbers from 1 to 10 is:", sum\_numbers)

**OUTPUT :**

The sum of numbers from 1 to 10 is: 55

**2. Write a function to find the Factorial of a number.**

**PROGRAM :**

def factorial(n):

    if n == 0:

        return 1

    else:

        return n \* factorial(n - 1)

number = int(input("Enter a number to find its factorial: "))

print("The factorial of", number, "is:", factorial(number))

**OUTPUT :**

Enter a number to find its factorial: 5

The factorial of 5 is: 120

**3. Create a Python program that checks if a user-given number is positive, negative, or zero.**

**PROGRAM :**

number = float(input("Enter a number: "))

if number > 0:

    print("The number is positive.")

elif number < 0:

    print("The number is negative.")

else:

    print("The number is zero.")

**OUTPUT :**

Enter a number: 4

The number is positive.

**4. Write a Python program to get the Fibonacci series between 0and 50.**

**PROGRAM :**

a, b = 0, 1

fibonacci\_series = []

while a < 50:

    fibonacci\_series.append(a)

    a, b = b, a + b

print("Fibonacci series between 0 and 50:", fibonacci\_series)

**OUTPUT :**

Fibonacci series between 0 and 50: [0, 1, 1, 2, 3, 5, 8, 13, 21, 34]