**Exercise 1: Calculate the Sum of Two Numbers**

**Description:** Write a program that takes two numbers as input and prints their sum.

***Pseudo Code:***

1. Start

2. Input number1

3. Input number2

4. sum = number1 + number2

5. Print sum

6. End

number1 = int(input("Please input number 1: "))

number2 = int(input("Please input number 2: "))

sum = number1 + number2

print(f"the sum of the two numbers are {sum}.")

**Exercise 2: Find the Maximum of Three Numbers**

**Description:** Write a program that takes three numbers as input and prints the largest one.

***Pseudo Code:***

1. Start

2. Input number1

3. Input number2

4. Input number3

5. if number1 > number2 and number1 > number3, then

       max = number1

   else if number2 > number1 and number2 > number3, then

       max = number2

   else

       max = number3

6. Print max

7. End

number1 = int(input("input number 1: "))

number2 = int(input("input number 2: "))

number3 = int(input("input number3: "))

if number1 > number2 and number1 > number3:

       max = number1

elif number2 > number1 and number2 > number3:

    max = number2

else:

    max = number3

print(f"The largest number is {max}.")

**Exercise 3: Print a List of Numbers from 1 to N**

**Description:** Write a program that takes an integer N and prints all numbers from 1 to N.

***Pseudo Code:***

1. Start
2. Input any number:
3. For each number in i in range(1, N +1):
   * 1. print I
4. print list
5. Write your solution here

 N = int(input("enter an int: "))

for i in range(1, N + 1):

    print(i)

**Exercise 4: Calculate the Factorial of a Number**

**Description:** Write a program that takes a number as input and calculates its factorial.

***Pseudo Code:***

1. Start
2. Ask user to input number
3. Create function factorial(n):
4. If n is 0 or 1, return 1
5. Else, return n multiplied by factorial(N-1)
6. Read input number from user
7. Call factorial function for N
8. Print result for factorial function
9. End

 n = int(input("Enter a number: "))

def factorial(n):

    if n == 0 or n == 1:

        return 1

    else:

        return n \* factorial(n - 1)

print(f"The factorial of {n} is {factorial(n)}")