**1. Write a Python Program to Display Fibonacci Sequence Using Recursion?**

def fibonacci(n):

if n <= 0:

return 0

elif n == 1:

return 1

else:

return fibonacci(n-1) + fibonacci(n-2)

nterms = int(input("How many terms? "))

if nterms <= 0:

print("Enter a positive integer")

else:

print("Fibonacci sequence:")

for i in range(nterms):

print(fibonacci(i))

**2. Write a Python Program to Find Factorial of Number Using Recursion?**

def factorial(n):

if n == 0:

return 1

else:

return n \* factorial(n-1)

num = int(input("Enter a positive integer: "))

if num < 0:

print("Enter a positive integer")

else:

print("The factorial of", num, "is", factorial(num))

**3. Write a Python Program to calculate your Body Mass Index?**

height = float(input("Enter your height in meters: "))

weight = float(input("Enter your weight in kilograms: "))

bmi = weight / (height \* height)

print("Your BMI is: ", bmi)

if bmi < 18.5:

print("Underweight")

elif bmi >= 18.5 and bmi < 25:

print("Normal")

elif bmi >= 25 and bmi < 30:

print("Overweight")

else:

print("Obese")

**4. Write a Python Program to calculate the natural logarithm of any number?**

import math

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

if number <= 0:

print("Enter a positive number")

else:

log = math.log(number)

print("The natural logarithm of", number, "is", log)

**5. Write a Python Program for cube sum of first n natural numbers?**

n = int(input("Enter the value of n: "))

if n <= 0:

print("Enter a positive integer")

else:

sum = 0

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

sum += i\*\*3

print("The sum of cubes of the first", n, "natural numbers is", sum)