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

```
# Python program to display the Fibonacci sequence


def recur_fibo(n):
  if n <= 1:
     return n
  else:
     return(recur_fibo(n-1) + recur_fibo(n-2))


nterms = 10


# check if the number of terms is valid
if nterms <= 0:
  print("Plese enter a positive integer")
else:
  print("Fibonacci sequence:")
  for i in range(nterms):
     print(recur_fibo(i))
```

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

```
# Factorial of a number using recursion

def recur_factorial(n):
  if n == 1:
     return n
  else:
     return n*recur_factorial(n-1)

num = 7

# check if the number is negative
if num < 0:
  print("Sorry, factorial does not exist for negative numbers")
elif num == 0:
  print("The factorial of 0 is 1")
else:
  print("The factorial of", num, "is", recur_factorial(num))
```

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

```
height = float(input("Enter your height in cm: "))
weight = float(input("Enter your weight in kg: "))
BMI = weight / (height/100)**2
```

```
print(f"You BMI is {BMI}")
```

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

```
import math

# Printing the log base e of 12
print ("Natural logarithm of 12 is : ", end="")
print (math.log(12))

# Printing the log base 5 of 13
print ("Logarithm base 5 of 13 is : ", end="")
print (math.log(13,5))
```

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

```
def sumOfSeries(n):

    sum = 0

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

        sum +=i*i*i


    return sum

# Driver Function

n = 5

print(sumOfSeries(n))
```