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

**Ans: def recur\_fibo(n):**

**if n <= 1:**

**return n**

**else:**

**return(recur\_fibo(n-1) + recur\_fibo(n-2))**

**nterms = 10**

**if nterms <= 0:**

**print("Plese enter a positive integer")**

**else:**

**print("Fibonacci sequence:")**

**for i in range(nterms):**

**print(recur\_fibo(i))**

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

**Ans: def recur\_factorial(n):**

**if n == 1:**

**return n**

**else:**

**return n\*recur\_factorial(n-1)**

**num = 7**

**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))**

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

**Ans: height = float(input("Input your height in Feet: "))**

**weight = float(input("Input your weight in Kilogram: "))**

**print("Your body mass index is: ", round(weight / (height \* height), 2))**

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

**Ans: import math**

**print(math.log(2.7183))**

**print(math.log(2))**

**print(math.log(1))**

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

**Ans: def sumOfSeries(n):**

**sum = 0**

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

**sum +=i\*i\*i**

**return sum**

**n = int(input( “enter value: ”))**

**print(sumOfSeries(n))**