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

**# Fibonacci series using Recursion**

**global a**

**global b**

**a=b=1**

**l=[a,b]**

**no=int(input("How many elements required in this series, minimum has to be 2 "))**

**def fib():**

**global a**

**global b**

**c=a+b**

**l.append(c)**

**a,b=b,c**

**if len(l) != no:**

**fib()**

**else:**

**print(l)**

**fib()**

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

**#Factorial of a number using Recursion**

**def fact(n):**

**if n==1:**

**return n**

**else:**

**return n\* fact(n-1)**

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

**#To calculate BMI**

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

**weight= float(input("Enter weight in Kgs: "))**

**square\_height=height\*height**

**BMI=round(weight/square\_height,1)**

**print("Your BMI is: {}".format(BMI))**

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

**# natural log of any number**

**import math**

**num=int(input("Enter a number: "))**

**l=math.log(num)**

**print("The natural log of {} is {}".format(num,l))**

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

**# Cube sum of first n natural numbers**

**n=int(input("Enter n: "))**

**result=0**

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

**result+=i\*\*3**

**print("The sum of cubes of first {} natural numbers is {}".format(n,result))**