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

def fibonacci\_rec(n):

if n<=1:

return n

else:

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

n\_term=int(input('enter the terms'))

for i in range(n\_term):

print(fibonacci\_rec(i))

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

def factorial(n):

if n<1:

return 1

else:

return n\*factorial(n-1)

n=int(input('enter number'))

factorial(n)

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

def bmi\_calculator():

weight=eval(input('enter weight kg'))

height=eval(input('enter height in mtrs'))

bmi\_calculator=weight/(height\*\*2)

if bmi\_calculator<18.5:

result='Underweight'

elif (bmi\_calculator>=18.5 and bmi\_calculator<24.9):

result='Normal'

elif (bmi\_calculator>=24.9 and bmi\_calculator<30):

result='Over weight'

else:

result='Obese'

print(f'Your BMI is{bmi\_calculator:.4f}and you are {result}')

bmi\_calculator()

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

import math

num=eval(input('enter number:'))

print('natural logorithm of of number {} is {}:'.format(num,math.log(num)))

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

def natural\_cube(n):

return (n\*(n+1)/2)\*\*2

natural\_cube(3)