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

nth = int(input("enter a how many terms you want : "))

def recur\_fibo(n):

if n<=1:

return n

else:

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

if nth <=0:

print("this is a negative or zero number type positive number")

else:

print("fibonacci sequennce")

for i in range(nth):

print(recur\_fibo(i))

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

nth = int(input("enter a factorial number: "))

def fac\_num(n):

if n==1:

return n

else:

return n\*fac\_num(n-1)

if nth <0:

print("this factorial does not exists")

elif nth ==0:

print("this factorial value is 0")

else:

print(nth,"factorial valuse is",fac\_num(nth))

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

height = float(input("enter a height in centimeter: "))

weight = float(input("enter a weight in kgs: "))

temp = height/100

BMI = weight/(temp\*temp)

print("your BMI is : %.2F" %BMI)

#Underweight = <18.5

#Normal weight = 18.5–24.9

#Overweight = 25–29.9

#Obesity = BMI of 30 or greate

if BMI <=18.5:

print("you are underweight")

elif BMI <=24.9:

print("your weight is Normal")

elif BMI <=29.9:

print("your weight is Overweight")

elif BMI >= 30:

print("your weight is Obesity")

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

import math

print("this is a value of log simple without base : ", math.log(14))

print("this is a value of log which is base is e : %.2F"%math.log(14, 5))

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

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

def sum\_natural(n):

count = 0

for i in range(0, n+1):

count = count+i\*i\*i

return count

print(sum\_natural(n))