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

**def** recurfib(n):

**if** n**<=**1:

**return** n

**else**:

**return** recurfib(n**-**1) **+** recurfib(n**-**2)

num **=** int(input("input no : "))

**if** num **<=**0:

print("Please provide positive no.")

**else**:

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

print(recurfib(i) , end**=**" ")

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

**def** fact(n):

**if** n**==**0:

**return** 1

**else**:

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

num **=** int(input("input a no : "))

**if** num**<**0:

print("Enter positive no.")

**else**:

print(fact(num))

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

**def** calculateBMI():

in\_weight **=** eval(input('Enter your Weight(kgs): '))

in\_height **=** eval(input('Enter your Height(mts): '))

calc\_bmi **=** in\_weight**/**pow(in\_height,2)

**if** (calc\_bmi **<** 18.5):

status **=** 'Underweight'

**elif** (calc\_bmi **>=** 18.5 **and** calc\_bmi **<** 24.9):

status **=** 'Healthy'

**elif** (calc\_bmi **>=** 24.9 **and** calc\_bmi **<** 30):

status **=** 'Overweight'

**elif** (calc\_bmi **>=**30):

status **=** 'Suffering from Obesity'

print(f'Your\'re BMI is {calc\_bmi} and status is {status} ')

calculateBMI()

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

**import** math

**def** genNatLog():

in\_num **=** eval(input("Enter a Number:"))

print(math**.**log(in\_num))

genNatLog()

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

**def** cubeOfNaturalNumbers():

in\_num **=** int(input("Enter the no of Natural Numbers: "))

result **=** pow(((in\_num **\*** (in\_num **+**1))**/**2),2)

print(f'The Cube Sum of First {in\_num} Natural Numbers is {result}')

cubeOfNaturalNumbers()