

1. Python Program to Display Fibonacci Sequence Using Recursion:

```
python
def fibonacci(n):
    if n <= 1:
        return n
    else:
        return (fibonacci(n-1) + fibonacci(n-2))

nterms = int(input("Enter the number of terms: "))

if nterms <= 0:
    print("Please enter a positive integer")
else:
    print("Fibonacci sequence:")
    for i in range(nterms):
        print(fibonacci(i))
```

2. Python Program to Find Factorial of Number Using Recursion:

```
python
def factorial(n):
    if n == 1:
        return n
    else:
        return n * factorial(n-1)

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

if num < 0:
    print("Sorry, factorial does not exist for negative numbers")
elif num == 0:
    print("The factorial of 0 is 1")
else:
    print(f"The factorial of {num} is {factorial(num)}")
```

3. Python Program to calculate your Body Mass Index:

```
python
def calculate_bmi(weight, height):
    return weight / (height ** 2)
```

```
weight = float(input("Enter your weight in kg: "))
height = float(input("Enter your height in meters: "))

bmi = calculate_bmi(weight, height)
print(f"Your BMI is {bmi:.2f}")
```

4. Python Program to calculate the natural logarithm of any number:

```
python
import math

num = float(input("Enter a number: "))

ln = math.log(num)

print(f"The natural logarithm of {num} is {ln:.2f}")
```

5. Python Program for cube sum of first n natural numbers:

```
python
def sum_of_cubes(n):
    return (n * (n + 1) / 2) ** 2

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

print(f"The sum of cubes of first {num} natural numbers is {sum_of_cubes(num)}")
```