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

Soln:

```
def fibonacci(a,b,c):
    if c > 0:
        c -= 1
        print(a, end=' ')
        temp = b
        b = a + b
        a = temp
        fibonacci(a,b,c)
```

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

Soln:

```
def factorial(n):
    if n == 0:
        return 1
    else:
        return n * factorial(n-1)

n = int(input("Enter a non-negative integer: "))

if n < 0:
    print("Error: Please enter a non-negative integer.")
else:
    print(f"The factorial of {n} is {factorial(n)}.")
```

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3. Write a Python Program to calculate your Body Mass Index

Soln:

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

bmi = weight / (height ** 2)
```

```
print(f"Your Body Mass Index is {bmi:.2f}.")
```

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

Soln:

```
import math

x = float(input("Enter a positive number: "))

if x <= 0:
   print("Error: Please enter a positive number.")
else:
   ln_x = math.log(x)

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

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

Soln:

```
n = int(input("Enter a positive integer: "))

if n <= 0:
   print("Error: Please enter a positive integer.")
else:
   cube_sum = 0
   for i in range(1, n+1):
      cube_sum += i ** 3

   print(f"The cube sum of the first {n} natural numbers is {cube_sum}.")
```