

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

```
In [1]: 1 num = int(input("Enter a Number: "))
        2 import math
        3 math.factorial(num)
```

Enter a Number: 5

Out[1]: 120

2. Write a Python Program to Display the multiplication Table? ¶

```
In [2]: 1 num = int(input("Enter a Number: "))
        2 for i in range(1, 11):
        3     print(num, "x", i, '=', num*i)
```

Enter a Number: 9

9 x 1 = 9
9 x 2 = 18
9 x 3 = 27
9 x 4 = 36
9 x 5 = 45
9 x 6 = 54
9 x 7 = 63
9 x 8 = 72
9 x 9 = 81
9 x 10 = 90

3. Write a Python Program to Print the Fibonacci sequence?

```
In [3]: 1 n = int(input("How many numbers do you want to see in Fibonacci series?? "))
        2 fibonacci_list = [1,2]
        3 for i in range(2,n):
        4     x = fibonacci_list[i-1] + fibonacci_list[i-2]
        5     fibonacci_list.append(x)
        6 print(fibonacci_list)
```

How many numbers do you want to see in Fibonacci series?? 10

[1, 2, 3, 5, 8, 13, 21, 34, 55, 89]

4. Write a Python Program to Check Armstrong Number?

```
In [4]: 1 num = int(input("Enter a Number: "))
        2 for i in range(num+1):
        3     num=i
        4     result = 0
        5     n= len(str(i))
        6     while(i!=0):
        7         digit=i%10
        8         result = result + digit**n
        9         i= i//10
       10 if num==result:
       11     print(num, "It's an ARMSTRONG Number!")
       12 else :
       13     print(num, "It's NOT an ARMSTRONG Number!")
```

Enter a Number: 153

153 It's an ARMSTRONG Number!

5. Write a Python Program to Find Armstrong Number in an Interval?

```
In [5]: 1 x = int(input("Enter a starting Number of Range: "))
2 y = int(input("Enter a starting Number of Range: "))
3 print("The Armstrong Numbers in the range mentioned are:")
4 for i in range(x,y):
5     num=i
6     result = 0
7     n= len(str(i))
8     while(i!=0):
9         digit=i%10
10        result = result + digit**n
11        i= i//10
12    if num==result:
13        print(num, end=" ")
```

Enter a starting Number of Range: 100
Enter a starting Number of Range: 1000
The Armstrong Numbers in the range mentioned are:
153 370 371 407

6. Write a Python Program to Find the Sum of Natural Numbers?

```
In [6]: 1 num1 = int(input("enter a number 1: "))
2 num2 = int(input("enter a number 2: "))
3 print("The Sum of two Numbers is",num1+num2)
```

enter a number 1: 4
enter a number 2: 6
The Sum of two Numbers is 10

```
In [ ]: 1
```