

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

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

```
factorial(5)
```

120

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

```
n = int(input("Enter the number"))  
for i in range(1,11):  
    n1 = n * i  
    print(n, 'X', i, '=', n1)
```

Enter the number5

5 X 1 = 5

5 X 2 = 10

5 X 3 = 15

5 X 4 = 20

5 X 5 = 25

5 X 6 = 30

5 X 7 = 35

5 X 8 = 40

5 X 9 = 45

5 X 10 = 50

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

```
def fibo(n):
    if n <= 1:
        return n
    else:
        return(fibo(n-1) + (n-2))
nterm = int(input("Enter the number of term: "))
if nterm > 0:
    print("Fibonacci sequence:")
    for i in range(nterm):
        print(recur_fibo(i), end = '  ')
```

Enter the number of term: 10
 Fibonacci sequence:
 0 1 1 2 3 5 8 13 21 34

4. Write a Python Program to Check Armstrong Number?

```
n = int(input("Enter the number: "))
sum = 0
temp = n
while temp > 0:
    digit = temp % 10
    sum = sum + digit ** 3
    temp //= 10
if n == sum:
    print("Entered number is an amstrong number")
else:
    print("Entered number is not an amstrong number")
```

Enter the number: 407
 Entered number is an amstrong number

```

n = int(input("Enter the number: "))
sum = 0
temp = n
while temp > 0:
    digit = temp % 10
    sum = sum + digit ** 3
    temp //= 10
if n == sum:
    print("Entered number is an amstrong number")
else:
    print("Entered number is not an amstrong number")

```

Enter the number: 634

Entered number is not an amstrong number

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

```

n = range(0,201)
for i in n:
    order = len(str(i))
    sum = 0
    temp = i
    while temp > 0:
        digit = temp % 10
        sum = sum + digit ** order
        temp //= 10
    if i == sum:
        print(i, "is an amstrong number")

```

```

0 is an amstrong number
1 is an amstrong number
2 is an amstrong number
3 is an amstrong number
4 is an amstrong number
5 is an amstrong number
6 is an amstrong number
7 is an amstrong number
8 is an amstrong number
9 is an amstrong number
153 is an amstrong number

```

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

```
sum = 0
n = int(input("Enter the term"))
for i in range(1,n+1):
    sum = sum + i
print('1','+', '2','+', '.', '.', '+', n, '=', sum)
```

Enter the term8

1 + 2 + . . + 8 = 36