

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

In [1]:

```
1 n=int(input())
2 k=1
3 for i in range(1,n+1):
4     k*=i
5 print(k)
```

4
24

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

In [3]:

```
1 for i in range(1,11):
2     for j in range(1,11):
3         print(i*j,end=" ")
4     print(" ")
```

```
1 2 3 4 5 6 7 8 9 10
2 4 6 8 10 12 14 16 18 20
3 6 9 12 15 18 21 24 27 30
4 8 12 16 20 24 28 32 36 40
5 10 15 20 25 30 35 40 45 50
6 12 18 24 30 36 42 48 54 60
7 14 21 28 35 42 49 56 63 70
8 16 24 32 40 48 56 64 72 80
9 18 27 36 45 54 63 72 81 90
10 20 30 40 50 60 70 80 90 100
```

In [5]:

```
1 n=int(input())
2 for i in range(1,11):
3     print(str(n)+str("*")+str(i)+"="+str(n*i))
```

```
5
5*1=5
5*2=10
5*3=15
5*4=20
5*5=25
5*6=30
5*7=35
5*8=40
5*9=45
5*10=50
```

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

In [8]:

```
1 n=50
2 a=1
3 b=1
4
5 print(a)
6
7
8 while a<=n:
9     print(a)
10    a,b=b,a+b
```

```
1
1
1
2
3
5
8
13
21
34
```

4. Write a Python Program to Check Armstrong Number?

In [16]:

```
1 n=int(input())
2 sum=0
3 m=len(str(n))
4 k=n
5 if m==1:
6     print("The given number is Armstrong")
7 else:
8     i=0
9     while i<=m:
10        c=k%10
11        sum+=c**m
12        k=k//10
13        i+=1
14    if sum==n:
15        print("The number is Armstrong")
16    else:
17        print("The number is not Armstrong")
```

```
407
The number is Armstrong
```

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

In [19]:

```
1 for i in range(1,500):
2     sum=0
3     m=len(str(i))
4     k=i
5     if m==1:
6         print(i)
7     else:
8         j=0
9         while j<=m:
10            c=k%10
11            sum+=c**m
12            k=k//10
13            j+=1
14        if sum==i:
15            print(i)
16
17
```

```
1
2
3
4
5
6
7
8
9
153
370
371
407
```

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

In [24]:

```
1 n=int(input())
2 print(f"The sum of {str(n)} natural numbers is {str(n*(n+1)//2)}")
```

```
5
The sum of 5 natural numbers is 15
```