```python
# 1.Write a python program to find the factorial of a number.

no = int(input("enter your number"))

fac=1

for num in range(1,no+1,1):
    fac=fac*num
    print(fac)
```
```
7
1
2
6
24
120
720
5040
```



```python
    # 2. Write a python program to check whether a given string is
palindrome or not.

string=str(input("type your string "))
revstring=reversed(string)

if list(string)==list(revstring):
    print('the given string is pallindrome')

else:
    print('the given string is not pallindrome')
```
```
    type your string nitin
the given string is pallindrome
```



```python
# 3.Write a python program to find whether a number is prime or composite
print("prime no verification")
i=2
no= int(input("type the number to verify"))

while i<=no:
    i=+i
    if no % i !=0:
        print("thr given number is prime")
        break
    else:
        print("the given number is composite")
        break
```

```
prime no verification
type the number to verify3
thr given number is prime
```



```
# 4. Write a Python program to get the third side of right-angled
triangle from two given sides.

import math

side_a=int(input("input your side 1 :"))
side_b=int(input("input your side 2 :"))
side_c=math.ceil(math.sqrt(side_a**2+side_b**2))
print("the third side of right angle triangle is : ",side_c)

input your side 1 :4
input your side 2 :5
the third side of right angle triangle is :  7
```



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# 5. Write a python program to print the frequency of each of the
characters present in a given string.

test_str = "My name is Ayush"
all_freq = {}

for i in test_str:
    if i in all_freq:
        all_freq[i] += 1
    else:
        all_freq[i] = 1
print ("Count of all characters in My name is Ayush is :\n "+
str(all_freq))

Count of all characters in My name is Ayush is :
 {'M': 1, 'y': 2, ' ': 3, 'n': 1, 'a': 1, 'm': 1, 'e': 1, 'i': 1, 's': 2,
'A': 1, 'u': 1, 'h': 1}
```