write a python program to find the factorial of a number

```
In [1]:
```

```
import math
def fact(n):
    return(math.factorial(n))
num=int(input('Enter a number'))
f=fact(num)
print("Factorial of ", num, "is : ", f)
```

Enter a number65
Factorial of 65 is : 824765059208247066672317030678549625218625855134543749292212313438
89557749760000000000000

12.write a python program to find whether a number is prime or composite

```
In [2]:
```

```
from math import sqrt
# n is the number to be check whether it is prime or not
# no lets check from 2 to sqrt(n)
# if we found any facto then we can print as not a prime number
# this flag maintains status whether the n is prime or not
prime flag = 0
if(n > 1):
   for i in range(2, int(sqrt(n)) + 1):
       if (n % i == 0):
           prime flag = 1
           break
    if (prime flag == 0):
       print("true")
    else:
       print("false")
else:
      print("false")
```

false

13.write a python programm to check whether a given string is palindrome or not

string=input(("Enter a string:")) if(string==string[::-1]): print("The string is a palindrome") else: print("Not a palindrome")

14.write a Python program to get the third side of right-annuled triangle from two given sides

```
In [5]:
```

```
# Python implementation of the approach

# Function to return the hypotenuse of the
# right angled triangle
def findHypotenuse(side1, side2):

   h = (((side1 * side1) + (side2 * side2))**(1/2));
   return h;

#Driver code
side1 = 3;
side2 = 4;
```

```
print(findHypotenuse(side1, side2));
```

5.0

15.write a python program to print the frequency of each of the characters present inn a given string

```
In [4]:
```

In []:

```
# Python3 code to find frequency of each word
# function for calculating the frequency
def freq(str):
    #break the string into list of words
    str_list = str.split()
    #gives set of unique words
   unique words = set(str list)
    for words in unique words:
       print('Frequency of ', words , 'is :',str list.count(words))
# driver code
if __name__== "__main__":
    str ='apple mango apple orange orange apple guava mango mango'
    # calling the freq function
    freq(str)
Frequency of guava is : 1
Frequency of apple is: 3
Frequency of mango is: 3
Frequency of orange is : 2
```