In [3]:
```
def factorial(n):
    return 1 if (n==1 or n==0) else n * factorial(n - 1)
num = 5
print("Factorial of", num,"is",factorial(num))
```

```
Factorial of 5 is 120
```

In [5]:
```
#Python program to check if given number is prime or not

num = 11

#if given number is greater than 1
if num > 1:
    for i in range(2, int(num/2)+1):
        if (num % i) ==0:
            print(num, "is not a prime number")
            break
    else:
        print(num, "is a prime number")

else:
    print(num, "is not a prime number")
```

```
11 is a prime number
```

In [15]:
```
#python program to check if given string is palindrome or not

def ispalindrome(s):
    return s == s[::-1]

s= "tat"
ans = ispalindrome(s)

if ans:
    print('Yes')
else:
    print('No')
```

```
Yes
```

In [16]:
```
x = "riir"

w = ""
for i in x:
    w = i + w

if (x == w):
    print("Yes")
else:
    print("No")
```

```
Yes
```

In [17]:
```
#Python program to get the third side of right-angled triangle from two given sides

import math

width = float(input('Please Enter the Width of a Right Angled Triangle:'))
height = float(input('Please Enter the Height of a right Angled Triangle:'))

Area = 0.5 * width * height

c = math.sqrt((width*width) + (height*height))
Perimeter = width + height + c

print("\n Area of a right angled triangle is:%.2f" %Area)
print("Other side of right angled triangle is: %.2f" %c)
print("Perimeter of right angled triangle is:%.2f" %Perimeter)
```

```
Please Enter the Width of a Right Angled Triangle:7
Please Enter the Height of a right Angled Triangle:8

 Area of a right angled triangle is:28.00
Other side of right angled triangle is: 10.63
Perimeter of right angled triangle is:25.63
```

In [21]:
```
#python program to print the frequency of each of the characters present in a given string
test_str = "DataScience"

res = {i : test_str.count(i) for i in set(test_str)}
print ("The count of all characters in DataScience is :\n"
                                            + str(res))
```

```
The count of all characters in DataScience is :
{'S': 1, 'c': 2, 'e': 2, 'D': 1, 'i': 1, 'n': 1, 'a': 2, 't': 1}
```

In [ ]:

In [ ]: