In [89]:
```
n=int(input('enter your number='))
result=1

while(n>=1):
   #print("----------------------------")
    #print("Before multiplication result=",result)
    result=result*n
   # print("after multiplication result=",result)


   # print("Before decrement n=",n)
    n=n-1
    #print("after decrement n=",n)


print(result)
```

```
enter your number=5
120
```

In [88]:
```
x=int(input('enter your number='))
i=2
while(i<=x/2):
  # print('x=',x)
   #print('i=',i)
   #nt('x%i=',x%i)
    composite=False
    if x%i==0:
      # print('composite')
        composite=True
        break


    i=i+1
   #print(i)


if composite==True:
    print("composite")
else:
    print("prime")
```

```
enter your number=20
composite
```

In [90]:
```
a=input('enter your string=')
y=a[::-1]

if a==y:
    print('palindrome')
else:
    print('not')
```

```
enter your string=hgdrf
not
```

In [99]:
```
first_side=int(input("Enter 1st side="))
second_side=int(input("Enter 2nd side="))
hypotenuse=input("put 'yes' if you already have entered the Hypotenuse length or else put 'no'= ")


if hypotenuse=='yes':
    if first_side>second_side:
        third_side=(first_side**2-second_side**2)**0.5
    else:
        third_side=(second_side**2-first_side**2)**0.5

else:
    third_side=(first_side**2+second_side**2)**0.5


print("Third side=",third_side)
```

```
Enter 1st side=5
Enter 2nd side=6
put 'yes' if you already have entered the Hypotenuse length or else put 'no'= yes
Third side= 3.3166247903554
```

In [110…
```
first_side=int(input('first side='))
second_side=int(input('2nd side='))
hypotenus=input('if hypotenus given enter yes,else no=')

if hypotenus=='yes' :
    if first_side>second_side:
        print((first_side**2-second_side**2)**0.5)
    else:
        print((second_side**2-first_side**2)**0.5)
else:
    print((first_side**2+second_side**2)**0.5)
```

```
first side=5
2nd side=4
if hypotenus given enter yes,else no=no
6.4031242374328485
```

In [114…
```
my_string=input('enter a string=')
dict1={}
for i in my_string:
    if i in dict1:
        dict1[i]=dict1[i]+1

    else:
        dict1[i]=1
print (dict1)
```

```
enter a string=sayan
{'s': 1, 'a': 2, 'y': 1, 'n': 1}
```

In [ ]:
```

```