

In [16]:



```
a=0
b=1
n=int(input('enter the number'))
print(' ',a,' ',b,end='')
for i in range(n):
    c=a+b
    a=b
    b=c
    print(' ',c,end='')

```

```
enter the number10
0  1 1 2 3 5 8 13 21 34 55 89

```

Factorial number without using parameters

In [3]:



```
def fact():
    fact=1
    n=int(input('enter the number: '))
    for i in range(1,n+1):
        fact=fact*i
    print(fact)
fact()

```

```
enter the number: 4
24

```

Factorial number using parameters

In []:



```
def fact(n):
    fact=1
    for i in range(1,n+1):
        fact=fact*i
    print(fact)
x=int(input('enter the number: '))
fact(x)

```

Even numbers using parameters

In [5]:



```
def evenums(l,u):
    for i in range(l,u):
        if i%2==0:
            print(i)
lower=int(input("Enter lower limit :"))
upper=int(input("Enter upper limit :"))
evenums(lower,upper)
```

Enter lower limit :5
Enter upper limit :20

6
8
10
12
14
16
18

Even numbers without using parameters

In [6]:



```
def evennum():
    lower=int(input("Enter lower limit :"))
    upper=int(input("Enter upper limit :"))
    for i in range(lower,upper):
        if i%2==0:
            print(i)
evennum()
```

Enter lower limit :5
Enter upper limit :20

6
8
10
12
14
16
18

Global scope:

In [7]:



```
v=100
def myfun():
    print(v)
myfun()
print(v)
```

100
100

Local value:

In [8]:



```
def myfun():  
    v=12  
    print(v)  
myfun()  
print(v)
```

12
100

Passing Arguments:

In [9]:



```
def user(*args):  
    print(args)  
user('shiv',12,2444)
```

('shiv', 12, 2444)

In [18]:



```
s=lambda *args:sum(args)  
s(1,2,3),s(3,4,5),s(7,8)
```

Out[18]:

(6, 12, 15)

Given number prime number or not

In [15]:



```
def prime(n):  
    n=int(input('enter the number'))  
    for i in range (2,n):  
        if n%i==0:  
            print(' given number is not prime number')  
        else:  
            print('given number is prime number')  
            break  
prime(n)
```

enter the number11
given number is prime number

In [16]:



```
def prime():  
    n=int(input('enter the number'))  
    for i in range (2,n):  
        if n%i==0:  
            print(' given number is not prime number')  
        else:  
            print('given number is prime number')  
            break  
prime()
```

enter the number7

given number is prime number

In []:

