

```
def showdata():  
    print('showdata function - start')  
    print(x)  
    print('showdata function - end')
```

```
x = 100
```

```
showdata()
```

```
showdata function - start  
100  
showdata function - end
```

```
x = 100 # global variable x
```

```
def modifydata():  
    x = 10 # local variable x  
    print('modifydata function - start')  
    print(x)  
    print('modifydata function - end')
```

```
print(x)
```

```
modifydata()
```

```
print(x)
```

```
100  
modifydata function - start  
10  
modifydata function - end  
100
```

```
x = 100 # global variable x
```

```
def modifydata(): # to modify global variable x value  
    global x # local variable x can not be created in-side current funct  
    x = 10 # global variable x  
    print('modifydata function - start')  
    print(x)  
    print('modifydata function - end')
```

```
print(x)
```

```
modifydata()
```

```
print(x)
```

```
100  
modifydata function - start  
10  
modifydata function - end  
10
```

```
print(a,b,c)
```

```
-----
NameError                                Traceback (most recent call last)
<ipython-input-9-7adbf16321d1> in <module>
----> 1 print(a,b,c)

NameError: name 'a' is not defined
```

SEARCH STACK OVERFLOW

```
def defineglobalvariables():
    global a,b,c
    a = 10
    b = 20
    c = 30
    print(a,b,c)
```

```
defineglobalvariables()
print(a,b,c)

10 20 30
10 20 30
```

```
def shownumbers():
    for i in range(1,11):
        print(i,end=' ')
```

```
shownumbers()

1 2 3 4 5 6 7 8 9 10
```

```
x = shownumbers()
print(x)

1 2 3 4 5 6 7 8 9 10 None
```

```
l = [1,2,5,4,8]
print(l.append(10))
print(l)

None
[1, 2, 5, 4, 8, 10]
```

▼ return

return is a keyword

return keyword can be used in function definition

return keyword is used to exit from current function

by default function block of code ends with return value None

```
def shownumbers():  
    for i in range(1,11):  
        print(i,end=' ')  
    return None
```

```
x = shownumbers()  
print(x)
```

```
1 2 3 4 5 6 7 8 9 10 None
```

```
def shownumbers():  
    for i in range(1,11):  
        print(i,end=' ')  
    return
```

```
x = shownumbers()  
print(x)
```

```
1 2 3 4 5 6 7 8 9 10 None
```

```
def square():  
    x = 10  
    print(x)  
    return x**2
```

```
y = square()  
print(y)
```

```
10  
100
```

```
def getdata():  
    return 'lokesh',5,7.25,[1,2,3,4,5],False
```

```
a,b,c,d,e = getdata()  
print(a,type(a))  
print(b,type(b))  
print(c,type(c))
```

```

print(d,type(d))
print(e,type(e))
lokesha <class 'str'>
5 <class 'int'>
7.25 <class 'float'>
[1, 2, 3, 4, 5] <class 'list'>
False <class 'bool'>

```

```

x = getdata()
print(x)
print(type(x))

('lokesha', 5, 7.25, [1, 2, 3, 4, 5], False)
<class 'tuple'>

```

```

def test():
    x = 10
    print(x)
    return x
    x = 'lokesha'
    print(x)
    return x
    x = False
    print(x)
    return x

```

```

i = test()
print(i)

```

```

10
10

```

```

i = test()
print(i)
j = test()
print(j)
k = test()
print(k)

```

```

10
10
10
10
10
10
10

```

```

def mytest():
    x = 100
    print(x, id(x))
    return x

```

```
y = mytest()
print(y, id(y))
100 9796256
100 9796256
```

```
def mytest():
    x = 100
    print(x, id(x))
    return 100
```

```
y = mytest()
print(y, id(y))

100 9796256
100 9796256
```

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