

- What is the result of the code, and explain?

```
1 >>> X = 'iNeuron'
2 >>> def func(): print(X)
3 >>> func()
```

In [1]:

```
1 x = 'ineuron'
2 def func():
3     print(x)
4
5 func()
6
7 #Ans. The global variables are accessible in side the functions in python.
8 #But we can not access function variable out side function.
9 #Since x is global variable we are able to print it in side the function solution
```

ineuron

- What is the result of the code, and explain?

In [2]:

```
1 x = 'ineuron'
2
3 def func():
4     x = 'NI!'
5
6 func()
7 print(x)
8
9 # Ans. The global variables are access in side the functions in python. But we ca
10 # Since x is golbal variable we are able to print it out side of the function sol
```

ineuron

- What does this code print, and why?

In [3]:

```
1 X = 'iNeuron'
2 def func():
3     X = 'NI!'
4     print(X)
5
6 func()
7 print(X)
8
9 #Ans. The global variables are access in side the functions in python. But we can
10 # X is updated with 'NI' which is Local to function and its immutable. its name s
```

NI!

iNeuron

- What output does this code produce? Why?

```
In [4]: 1 X = 'iNeuron'
2 def func():
3     global X
4     X = 'NI!'
5     print(X)
6
7 func()
8 print(X)
9 #Ans. since the X in side function is made Global, it will be accesible out side
10 #now X will have new value.
11
12 #solution : 'NI!', 'NI!'
```

NI!
NI!

- What about this code—what's the output, and why?

```
In [5]: 1 X = 'iNeuron'
2 def func():
3     X = 'NI'
4 def nested():
5     print(X)
6
7 nested()
8 func()
9 X
10
11 #Ans. the nested() function will print 'iNeuron', Then func() does not display an
12 # and x = 'NI' is not accessible out
13 #side the function.
14 #Solution : 'iNeuron'
```

iNeuron

Out[5]: 'iNeuron'

- How about this code: what is its output in Python 3, and explain?

```
In [6]: 1 def func():
2     X = 'NI'
3     def nested():
4         nonlocal X
5         X = 'spam'
6     nested()
7     print(X)
8
9 func()
10
11 #Nonlocal variables are used in nested functions whose local scope is not defined
12 #This means that the variable can be neither in the local nor the global scope. i
13 #function
14
15 #Sol : 'spam'
```

spam

In []:	1	
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