1. What is the result of the code, and explain?

>>> X = 'iNeuron'

>>> def func():

print(X)

>>> func()

Answer: First of all we declaring a variable X and assigning a value of ‘iNeuron’ to it. Now we are

Calling a function called func() and printing the value of X inside when the function func() is getting

Called from outside.

2. What is the result of the code, and explain?

>>> X = 'iNeuron'

>>> def func():

X = 'NI!'

>>> func()

>>> print(X)

Answer: Here we are again declaring a variable x containing a value of ‘iNeuron’and calling the

Function func() which does not return or print anything but stores value of NI! To x withing function

and finally it prints the original value of X.

3. What does this code print, and why?

>>> X = 'iNeuron'

>>> def func():

X = 'NI'

print(X)

>>> func()

>>> print(X)

Answer: First , a function call to func() is made within that we are printing the local value of x present in that function. Now we come out of the function and print the original value of x which is ‘iNeuron’

4. What output does this code produce? Why?

>>> X = 'iNeuron'

>>> def func():

global X

X = 'NI'

>>> func()

>>> print(X)

Answer: First of all we have a value of ‘iNeuron’ assigned to x . Now func() is called and in that function we assign a keyword global to x which can overwrite the existing value of x to the one which is assigned within the function and upon print statement we can get the new updated value of x now.

5. What about this code—what’s the output, and why?

>>> X = 'iNeuron'

>>> def func():

X = 'NI'

def nested():

print(X)

nested()

>>> func()

>>> X

Answer: First of all, the NI! Will be printed as it is local value to x within the func() function and then global value of X = ‘iNeuron’ will be printed.

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

>>> def func():

X = 'NI'

def nested():

nonlocal X

X = 'Spam'

nested()

print(X)

>>> func()

Answer: Both print statements will give ‘Spam’ as output. First, we print value of x within nested() function and then we again print updated value of x = ‘Spam’ which was updated within nested() function.