

## Answer's / Explanation's

1. Result of code is 'iNeuron'

Reason is,

As X is not defined inside the function. The func() function uses global X variable. As global X variable stores 'iNeuron', so it outputs 'iNeuron'.

2. Result of code is,

'iNeuron'

Reason is,

func() function will use local variable X, as X is defined inside the function but changes to it doesn't reflect on global variable X. So, print(X) will print 'iNeuron'.

3. Result of code is,

'NI'

'iNeuron'

Reason is,

func() function will use local variable X to print. So, func() will output 'NI'. But the assignment of X inside the function will not change the global variable X. So, print(X) will print 'iNeuron'.

4. Result of code is,

'NI'

Reason is,

func() uses global variable X, so as after calling func() the global variable X is changed from 'iNeuron' to 'NI' so, print(X) after calling func() will change X and print 'NI'.

5. Result of code is,

'NI'

'iNueron'

Reason is,

As nested() function nested inside func() function, Variables defined inside func() are global variables to nested() function. So, print(X) inside nested() function will print local variable X to func() which is 'NI'. But it can't change the global variable X. So, X will output 'iNeuron' to the console.

6. Result of code is,

'Spam'

Reason is,

As nested() function using nonlocal variable X, changes inside nested() function reflects in local variable X. So, it print 'Spam'.