

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

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

```
>>> func()
```

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

```
>>> X = 'iNeuron'
>>> def func():
    X = 'NI!'
```

```
>>> func()
>>> print(X)
```

3. What does this code print, and why?

```
>>> X = 'iNeuron'
>>> def func():
    X = 'NI'
    print(X)
```

```
>>> func()
>>> print(X)
```

4. What output does this code produce? Why?

```
>>> X = 'iNeuron'
>>> def func():
    global X
    X = 'NI'
```

```
>>> func()
>>> print(X)
```

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

```
>>> X = 'iNeuron'
>>> def func():
X = 'NI'
def nested():
print(X)
nested()
```

```
>>> func()
>>> X
```

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()
```