INEURON ASSIGNMENTS

Python Basics : Assignment 3

Question 1: Why are functions advantageous to have in your programs?

Answer:

- Functions will help to reuse the code.
- Breaks the complex code into pieces which give easy references and maintenance
- Improves code clarity

Question 2: When does the code in a function run: when it's specified or when it's called

Answer:

- Code in function will run when function call.
- Function will be called at any place out of the function or within the function. If function is called within function, it called as recursive function.

```
def function1():
    <code>

function1() # function call
```

Question 3: What statement creates a function.

Answer:

- def is the keyword to define function.
- **def** <function name>:
  <function code>

Question 4: What is the difference between a function and a function call?

Answer:

- "**Function**" is a piece of code to do some tasks.
- Whereas "**Function call**" is to invoke/call the Function to execute the function code.

Question 5: How many global scopes are there in a Python program? How many local scopes

Answer:

- There is only one global scope for the program until its name or value changed.
- There can be more than one local scope dependents on the program. The variable defines within function/ class will be act as local variable.

Question 6: What happens to variables in a local scope when the function call returns

Answer:

- When a function returns, the local scope is destroyed, and all the variables in it are forgotten.

```
def function1():
    a = 10
    b = 20
    return a + b

a = function1() # function call
print(a)
```

```
30
```

Question 7: What is the concept of a return value? Is it possible to have a return value in an expression

Answer:

- A return value is the value that a function call evaluates to. Like any value, a return value can be used as part of an expression.

Question 8: If a function does not have a return statement, what is the return value of a call to that function

Answer:

- The answer is None.

```
def function1():
    a = 10
    b = 20
    a + b

a = function1() # function call
print(a)
```

```
None
```

Question 9: How do you make a function variable refer to the global variable

Answer:

- Using 'global' keyword, we can make function variable as global variable.

```
def function1():
    global b
    b = 10

function1() # function call
print(b)
```

```
10
```

Question 10: What is the data type of None

Answer:

- None is the datatype of the class NoneType and None is a keyword and object of the NoneType class.

Question 11: What does the sentence import areallyourpetsnamederic do

Answer:

- If such module is already created by user, then it is possible. If not, it will throw error as such module is not found.

```
import areallyourpetsnamederic
```

```
---------------------------------------------------------------------------
ModuleNotFoundError                       Traceback (most recent call last)
Input In [20], in <cell line: 1>()
----> 1 import areallyourpetsnamederic

ModuleNotFoundError: No module named 'areallyourpetsnamederic'
```

Question 12: If you had a bacon() feature in a spam module, what would you call it after importing spam

Answer:

- This function can be called with spam.bacon()

Question 13: What can you do to save a programme from crashing if it encounters an error?

Answer:

- We can use try..except. Place block of code that assumes to get error and place block of code in except clause to handle error.

Question 14: What is the purpose of the try clause? What is the purpose of the except clause?

Answer:

- Try clause is used to place code lines which have chance to cause errors. Except clause is used to place code lines if any error occurs in Try clause.