**PYTHON ASSIGNMENT - 3**

1.Why are functions advantageous to have in your programs?

ANSWER:

Functions help in organizing code into reusable blocks, improving readability, and reducing redundancy. They also promote modular programming, making it easier to debug and maintain code.

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

ANSWER:

When it is called.

3. What statement creates a function?

ANSWER:

The **def** statement

4. What is the difference between a function and a function call?

ANSWER:

A function is a block of code that performs a specific task, whereas a function call is the action of invoking/executing that function to perform its task.

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

ANSWER:

There is 1 global scope. Local scopes are created whenever a function is called, so the number of local scopes depends on how many functions are called during program execution.

6. What happens to variables in a local scope when the function call returns?

ANSWER:

Variables in a local scope cease to exist (are destroyed) when the function call returns, meaning they cannot be accessed from outside the function.

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 sends back to the caller after execution. Yes, it is possible to have a return value in an expression, where the return value is used as part of a larger expression.

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

ANSWER:

If a function does not have a return statement, the return value of a call to that function is **None**.

9. How do you make a function variable refer to the global variable?

ANSWER:

You can use the global keyword followed by the variable name inside the function to make it refer to the global variable.

10. What is the data type of None?

ANSWER:

NoneType

11. What does the sentence import areallyourpetsnamederic do?

ANSWER:

This statement imports a module named "areallyourpetsnamederic" into the current Python script, allowing you to use its functions and variables.

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

ANSWER:

import spam

spam.bacon()

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

ANSWER:

We can use exception handling techniques such as try-except blocks to catch and handle.

14. What is the purpose of the try clause? What is the purpose of the except clause?

ANSWER:

The try clause is used to enclose the code that may potentially raise an exception. The except clause is used to specify the actions to be taken if a particular exception occurs within the try block. It allows the program to handle exceptions and continue execution without crashing.