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

Functions enhance the structure, reusability, maintainability, and collaborative development of programs, leading to more efficient and robust code.

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

The code in a function runs when it is called, not when it is specified.

1. What statement creates a function?

‘def’ statement is used to create a function. Eg: ‘def func\_name():’

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

A function is a block of reusable code that performs a specific task, while a function call is the action of invoking or executing a function, running its code to accomplish the desired task at a specific point in a program.

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

In a Python program, there is one global scope, which encompasses the entire program and is accessible from anywhere within it. It holds global variables that can be accessed throughout the program.

The number of local scopes in a program depends on the number of function calls made during its execution. Each function call creates a new local scope, and the total count of local scopes corresponds to the number of function calls made throughout the program.

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

When a function call returns in Python, the local scope associated with that function is destroyed.

1. What is the concept of a return value? Is it possible to have a return value in an expression?

Yes, it is possible to have a return value in an expression. In Python, a function can be called within an expression, and the return value of that function can be used as part of the expression.

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

Ans: None.

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

Using global keyword makes a function variable refer to a global variable.

1. What is the data type of None?

Ans: NoneType

1. What does the sentence import areallyourpetsnamederic do?

It tends to import the module named areallyourpetsnamederic. If there is no module available with that name, it throws ‘ModuleNotFoundError’.

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

import spam

spam.bacon()

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

Exception handling is a programming technique that allows you to catch and handle errors or exceptions that may occur during program execution, preventing the program from crashing and providing a mechanism to handle exceptional situations.

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

In Python, the try block is used to enclose the code that may raise an exception, while the except block is used to specify the code that should be executed if an exception occurs within the try block, allowing for error handling and preventing program crashes.