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

Ans- Functions in Python are advantageous because they promote code modularity, reusability, readability, abstraction, encapsulation, scoping, and facilitate testing and debugging.

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

Ans - The code in a function runs when the function is called, not when it's specified.

1. What statement creates a function?

Ans - the def statement is used to create a function.

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

Ans - A function is a block of code designed to perform a specific task when called. A function call is the act of executing that function to perform the task.

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

Ans - there is one global scope, which exists throughout the entire program. Local scopes are created whenever a function is called, and each function call creates its own local scope.

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

Ans - When a function call returns, the local scope associated with that function is destroyed, and any variables defined within that local scope cease to exist. These variables are no longer accessible once the function call completes, and any attempts to reference them outside of the function will result in a NameError.

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

Ans - A return value in programming is the value a function sends back after execution. Yes, it's possible to have a return value in an expression; we can use the result of a function call directly in an expression.

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

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

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

Ans - use the global keyword followed by the variable name inside the function.

1. What is the data type of None?

Ans - The data type of None in Python is NoneType.

1. What does the sentence import areallyourpetsnamederic do?

Ans - The sentence import areallyourpetsnamederic imports a module named areallyourpetsnamederic, if it exists, making its contents accessible in the Python script.

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

Ans- After importing the spam module, you would call the bacon() feature using dot notation as follows: spam.bacon().

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

Ans – we can use error handling techniques like try-except blocks.

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

Ans- The purpose of the try clause in a try-except block is to enclose the code that might raise an exception. It allows you to execute potentially error-prone code without crashing the program.

The purpose of the except clause is to specify the code that should be executed if an exception occurs within the try block. It catches and handles the exception, allowing you to gracefully respond to errors and continue program execution.