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

Functions reduce the need for duplicate code. This makes programs shorter, easier to read, and easier to update.

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

The code in the function run when its called

3.What statement creates a function?

A function is created with the def keyword. The statements in the block of the function must be indented. The def keyword is followed by the function name with round brackets and a colon.

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

A function is a block of organized, reusable code that is used to perform a single, related action. Functions provide better modularity for your application and a high degree of code reusing.

A function in a program is called by function call statement. To call a function, write the function name followed by parameter values in brackets. A block of statements executed in the execution frame. When a function is called, an execution frame is created and control the transfer.

A function call is what moves the program execution into the function, and the function call evaluates to the function’s return value.

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

There’s only one global scope per program execution. This scope remains in existence until the program terminates and all its names are forgotten and local scope is created whenever a function is called.

Local Scope-The Variables which are defined in the function are a local scope of the variable

Global Scope-The Variable which can be read from anywhere in the program is known as a global scope. These variables can be accessed inside and outside the function. When we want to use the same variable in the rest of the program, we declare it as global.

NonLocal or Enclosing Scope-Nonlocal Variable is the variable that is defined in the nested function. It means the variable can be neither in the local scope nor in the global scope

Built-in ScopeIf a Variable is not defined in local, Enclosed or global scope, then python looks for it in the built-in scope

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

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

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

A return is a value that a function returns to the calling script or function when it completes its task. A return value can be any one of the four variable types: handle, integer, object, or string.

It is possible to have a return value in an expression

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

If a function doesn't specify a return value, it returns None

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

use the **global** keyword to declare which variables are global.

10. What is the data type of None?

The data type of None is NoneType.

11. What does the sentence import areallyourpetsnamederic do?

That import statement imports a module named areallyourpetsnamederic

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

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

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

Exception handling using try - except and try - except – finally

Place the line of code that might cause an error in a try clause.

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

The try block is used to check some code for errors i.e the code inside the try block will execute when there is no error in the program. Whereas the code inside the except block will execute whenever the program encounters some error in the preceding try block.