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

**Ans- Functions provide a way to organize, reuse, and simplify code, leading to more maintainable, readable, and efficient programs.**

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

**Ans- The code in a function run when it’s called not when it’s specified.**

1. What statement creates a function?

**Ans- The ‘def’ statement is used to create a function. It is the keyword used to define a new function with a specified name and a block of code that represents the function's behaviour.**

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

Ans- **A "function" is a block of code with a name and behaviour, defined using the def statement, while a "function call" is the actual act of using the function by invoking it with specific arguments to perform its tasks.**

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

**Ans- a) There is only one global scope in a Python program.**

**b) Local scopes are created within functions and class methods.**

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

**Ans- Any variables that were created inside the function (local variables) are no longer accessible once the function returns. These variables are removed from memory, and any attempt to access them outside the function will result in a NameError because they are no longer in scope.**

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

**Ans- The concept of a return value is closely related to functions in programming. A return value is the value that a function "returns" to the caller after it has executed its code and completed its task.**

**Yes, it is possible to have a return value in an expression. When a function returns a value, we can use that return value directly in an expression or assign it to a variable for further use.**

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- To make a function variable refer to a global variable in Python, we can use the global keyword inside the function**.

1. What is the data type of None?

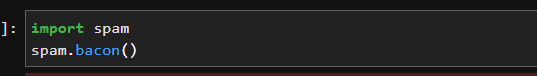
**Ans- The data type of None is ‘NoneType’ in Python.**

1. What does the sentence import areallyourpetsnamederic do?

**Ans- It will result in in error as there is no such module or package ‘areallyourpetsnamederic’ in Python.**

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

**Ans- using dot(.) notation below is the screenshot:**



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

**Ans-** **To prevent a program from crashing when it encounters an error, we can use exception handling in Python.**

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

**Ans- Try clause:**

**The try clause is used to enclose the code that might raise an exception. When the code inside the try block encounters an error or an exception is raised, Python will immediately stop executing that block and jump to the corresponding except block.**

**Except clause:**

**The except clause is used to define the code that should be executed when an exception is caught in the corresponding try block. It allows to handle specific types of exceptions and take appropriate actions based on the type of exception caught.**