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

Ans: Advantages of functions are as follows:

* Functions allow to define a block of code that can be reused multiple times within a program.
* Functions help break down a complex program into smaller, more manageable pieces called modules.
* Functions enhance code readability.
* Functions make it easier to test and debug code.
* Functions can be collected into modules or packages and reused across different projects.

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

ANS: The code inside a function in Python runs when the function is **called**.

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 defined block of code that specifies a particular task or a set of tasks, while a function call is the act of using that function in the code to execute the defined tasks.

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

ANS: In a Python program there is only one global scope but multiple local scopes can be present.

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

ANS: When the function call returns, the local scope of that function, including the variables defined within it, is destroyed and are no longer accessible to use.

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

ANS: A return value refers to the value that a function or method outputs after it has been executed.

Return values are associated with functions and cannot be used directly in expressions outside of function calls.

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, it returns a special value called **None.**

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

ANS: The keyword “global” is used before the variable name to make a function variable refer to the global variable.

1. ***What is the data type of None?***

ANS: The datatype of None belongs to class NoneType in Python.

1. ***What does the sentence import areallyourpetsnamederic do?***

ANS: It would raise a **ModuleNotFoundError** indicating that the module "areallyourpetsnamederic" could not be found, as the word import is used to import modules.

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

*ANS: import spam*

*spam.bacon()*

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

ANS: To prevent a program from crashing when encountering an error, error handling mechanisms can be implemented.

For example: try-except blocks to catch and handle exceptions

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

ANS: In error handling, the try and except clauses are used together to handle exceptions or errors that may occur during the execution of a program.