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

Functions help avoid code duplication, making code easier to maintain and debug. Function parameters can be used to pass data into a function. Return values can pass information from a function back to the caller. Functions can be used to create modules and libraries, allowing for code reuse.

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

A Function runs only when its called.

1. What statement creates a function?

- define a function with the def keyword

- then write the function identifier (name) followed by parentheses and a colon.

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

a function is a block of code that performs a specific task wheras a function call is an expression that invokes a function and executes the code in the function.

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

There's only one global Python scope per program execution. This scope remains in existence until the program terminates and all its names are forgotten. Usually, the local scope references the local names of the (textually) current function. Outside functions, the local scope references the same namespace as the global scope: the module's namespace.

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

When the execution of the function terminates (returns), the local variables are destroyed

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

The Python return statement is a special statement that you can use inside a function or method to send the function's result back to the caller. A return statement consists of the return keyword followed by an optional return value. The return value of a Python function can be any Python object.

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

any function without an explicit return statement, or one with a return statement without a return value, will return None .

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

when we create a variable inside a function, that variable is local, and can only be used inside that function. To create a global variable inside a function, we have to use the global keyword.

1. What is the data type of None?

NoneType

1. What does the sentence import are all your pets namederic do?
2. If you had a bacon() feature in a spam module, what would you call it after importing spam?

Spam.Bacon()

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

We can handle errors and exceptions using the try-except block. The try block is where we place the code that might raise an exception, while the except block is where we handle the exception if it occurs

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

A Try-Except statement is a code block that allows your program to take alternative actions in case an error occurs. Python will first attempt to execute the code in the try statement (code block 1). If no exception occurs, the except statement is skipped and the execution of the try statement is finished.