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

Ans:

Re-usablity: Functions allows us to define a block of code that can be reuse multiple times in our program. Once we define a function we can call it whenever we need to perform a specific task, rather than re-writing the same code again. This will improve program efficiency.

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

Ans:

When we define a function, means we are creating a named block of code that defines a particular functionality. This code within the function will not execute at the time of function creation. To execute the code within a function, we need to call the function by using its name followed by ().

1. What statement creates a function?

Ans:

In python, ‘def’ statement is used to create a function. ‘def’ statement is followed by a function name and parenthesis () and followed by indented code and at the end of the code return statement which is optional. And we can optionally provide some paramaters in the parenthesis.

Ex syntax:

def function\_name(parameters):

# code block

retrun statement

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

Ans:

Function: Function is just a definition of the code. This will not execute while creating the function

Function call: After defining the function, whenever we require that functionality in our code, we have to call the function to execute the code which was defined within the function.

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

Ans:

**Global Scope:** Global scope refers to the outermost level of the program, where global variables and functions are defined.

There is only one global scope in Python programming language.

**Local Scope:** local scopes are created whenever a function is called or when a block of code, such as a loop or conditional statement, is executed.

Python programming can have multiple local scopes depends on number of function calls.

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

Ans:

When a function call returns in Python, the local variables defined within the function's local scope are destroyed and cease to exist.

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 in programming refers to the value that a function can send back to the code that called it. When a function is executed, it may perform certain operations and produce a result.

And yes, it is possible to have a return value 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 doesn’t have a return statement, it will still call the function and will give ‘None’ as an output.

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

Ans:

To make a function variable refer to global variable in python, we can use ‘global’ keyword.

Example code:

x = 10

def fun():

global x

x = 10

fun(x)

output: 10

1. What is the data type of None?

Ans:

None is a special constant that represents the absence of a value. It is has its own data type called ‘NoneType’

1. What does the sentence import areallyourpetsnamederic do?

Ans:

Areallyourpetsnamederic is not a valid module. It will give a “ModuleNotFoundError” encounter.

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:

We can save a programme from crashing by using exception handling.

Ex:

try:

x = 5/0

except ZeroDivisionError:

print(“ Number cannot be divisible by zero”)

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

Ans:

Try: The purpose of the try clause in Python is to enclose a block of code that might potentially raise an exception. It allows us to specify a section of code that we want to monitor for errors or exceptions.

Except: The except clause is used to define the actions to be taken if a specific type of exception occurs within the associated try block. It allows you to handle specific exceptions that you anticipate might be raised and provides a way to respond to them appropriately.