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

* Functions makes & break down the code structure in organized and structured manner which helps user better understandability.
* Once we defined a function, we can reuse the same in any part of the program and can call the same whenever required.
* Using function, user can make changes and update the specific part of the program without affecting the code structure.

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

- Code in function runs when user calls the function. This is done by using the function name followed by parentheses.

- Code in function gets specified when it is defined but it does not gets execute until the function is called. When the function gets called code gets executed.

1. What statement creates a function?

- def function\_name ():

Refer to above line, **def** statement followed by function name and parentheses followed by colon creates a function.

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

-function is a block of code that executes the given task. Function is written as **def** statement followed by function name and parentheses followed by colon creates a function. We can pass the arguments inside the parentheses. Function is used to write as program in structured manner and to reuse the order anywhere in the program.

- While Code in function gets specified when it is defined but it does not gets execute until the function is called. When the function gets called code gets executed. We can call the function by writing the function name followed by parentheses.

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

-There are One global scope in the python and there can be multiple local scopes.

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

def Employee () :

No\_of\_Employees = 10

print ("The no of employees are : ", No\_of\_Employees )

Employee ()

print ("The no of employees are : ", No\_of\_Employees)

* In above code when we define the function name Employee and assigned a value 10 to local variables and call the function, print statement gets executed. However, once the function call completes, the local scope is destroyed, and the variable No\_of\_emplouess is no longer accessible outside the function. So, when we executes the outside print statement it will show error stating the local variable is not defined. It helps to resolve memory issue and the conflict of code by creating the different local environment.

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

- Return is used when we want to execute an iteration outside the function. 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?

- None

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

- We can make a function variable refer to the global variable by using the global keyword. The global keyword indicates that a variable is a global variable, and it should be accessed or modified at the global scope.

10. What is the data type of None? – NonType (It is built in data type in python)

11. What does the sentence import areallyourpetsnamederic do?

- It results in an error

ModuleNotFoundError: No module named 'areallyourpetsnamederic'

Generally a import keywoord is used to get the packages or libraray/modules in a code. However areallyourpetsnamederic doesn’t have any packages/library.

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

import spam

spam. Bacon() #Way of represnting

Also, this results in error too named “ModuleNotFoundError.”

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

- We can use the block of code using Try and except type to avoid the programme from crashing.

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

- Try clause:

In try clause we write the code that can cause the error unintentionally. This is used when we want to execute the long para code say more than 200-300 lines. If an exception occurs within the try block, the normal flow of execution is interrupted, and the program jumps to the corresponding except block.

Except clause \_

If an excepting is raise in the try block then code in the except block gets executed,

Except clause is used to write the possibility of error name or error can occurred while executing the code to avoid the crashing of programme.