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

Ans.1

1. Write a function once & will use in the program as and when require. We avoid mistake or typing error once we write a function first time & use it number of time in same program.
2. In a large program if we use functions, it is help us to debug program as and when require.

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

Ans.2

A function is a block of codes which only runs when it is called. We can pass the data, known as parameters in to function.

A function can return data as a result.

3. What statement creates a function?

Ans3.

In python function is defined using the def keyword followed by our chosen name, followed by a set of parentheses which hold any parameters the function will take, and ending with a colon.

Our function is now fully defined, but if we run the program, nothing will happen since we didn’t call the function.

So outside of our defined function block, call the function with chosen name.

For example :

def test():

print(‘ first function created by me’)

test()

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

Ans.4

Defining a function is different from “calling a function.” When you “call” a function, you just write the name of the function followed by () like this: test() This will actually run the code inside that function, whereas defining the function does not run the code. It just defines the name with given details like arguments or logic or condition.

For example for defined function.

def test(a,b):

c=a+b

print(c)

for now call to this test function , use below code:

test(2,3)

output is 5.

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

Ans.5

A variable created in the main body of the Python code is a **global** variable and belongs to the **global scope**. Only one global scope per program execution. This scope remains in existence until the program terminates and all its names are forgotten. A variable created outside of a function is global and can be used by anyone.

A variable created inside a function belongs to the ***local scope*** of that function, and can only be used inside that function.

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

Ans.6

Local variables are destroyed when the function call returns and memory occupied by them are freed for any other variable.

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

Ans.7

A**return statement** is used to end the execution of the function call and “returns” the result (value of the expression following the return keyword) to the caller. The statements after the return statements are not executed. If the return statement is without any expression, then the special value None is returned. A **return** **statement** is overall used to invoke a function so that the passed statements can be executed.

Return statement cannot be used outside the function.

Yes, If the return statement contains an expression, it’s evaluated first and then the value is returned.

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

Ans.8

None.

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

Ans.9

If you want to refer to a global variable in a function, you can use the global keyword to declare which variables are global

(Before variable defined inside the function use ‘global’ keyword)

10. What is the data type of None?

Data type of None is None Type only. None is not the same as 0, False or empty string.

11. What does the sentence import are allyourpetsnamederic do?

Ans.11

This sentence imports the module “areallyourpetsnamederic”

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

Ans.12

Spam.bacon()

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

Ans.13

Exception Handling can be used to notify the user of why the error occurred and gracefully exit the process that caused the error

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

Ans.14

Try block is used to check some code for errors.

For example: the code inside the try block will execute when there is no error in the program.

Where the code inside the except block will execute whenever the program encounters some error in the preceding try block