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

Answer 1: Functions are advantageous in programs as they:

1. Increase the readability of the program
2. Makes it easy to write the program in a modular fashion.
3. Functions help in reusability. Helps in avoiding writing the same codes again and again.

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

Answer 2: The code in a function runs when the function is called.

3. What statement creates a function?

Answer 3: ‘def’ statement creates a custom function.

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

Answer 4: Function is the code that helps make the program reusable and modular. It does nothing until it is called.

Function call means calling the function which runs the code mentioned inside the particular function.

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

Answer 5: There's only one global Python scope per program execution. There can be multiple local scopes in a Python program per execution. The number will depend on the functions included in the program.

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

Answer 6: Variables in a local scope get wiped out after the function call returns.

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

Answer 7: A return statement is used to end the execution of the function call and “returns” the result to the caller.

No, a return statement can only be used inside a function. If used outside of a function, we will get a syntax error.

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

Answer 8: If a function doesn’t have a return statement, it will not return any values unless there is a print statement. Also, the value type of such a function would be of ‘NoneType’.

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

Answer 9: ‘global’ keyword can be used declare the global variable. Then the function variable can be used to refer to a global variable inside the function.

10. What is the data type of None?

Answer 10: The None keyword is used to define a null value, or no value at all. None is not the same as 0, False, or an empty string. None is a data type of its own (NoneType).

11. What does the sentence import areallyourpetsnamederic do?

Answer 11: Import statement will import a module named areallyourpetsnamederic.

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

Answer 12: spam.bacon()

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

Answer 13: We can use the try and except so that when the program encounters an error, the control is passed to the except block, skipping the code in between.

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

Answer 14: Try clause will try to run the program. In case an error occurs, the control will be passed to the except block to ensure the program doesn’t crash. Instead, the except block(s) can be used to get an error message.