

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

Ans: Following are the advantages of the functions in a program:

- a) It makes the code reusable.
- b) It promotes collaborative work.
- c) It saves up memory.
- d) Repetition of the code is avoided.
- e) It helps to break the bigger problem into smaller chunks and increases efficiency.

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

Ans: Once the function is specified, the code in the function only runs when it is CALLED.

3. What statement creates a function?

Ans: Following is the syntax for creating functions:

```
def functionname(arguments):  
    "piece of code"
```

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

Ans: A function is a piece of code in a program that has many uses e.g reusability, efficiency increase. And to use this function, we need to invoke this function which is called Function call.

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

Ans: Variables that are created inside the functions and can be accessed only inside the function are said to have local scope, and we can have multiple scopes.

However, Variables outside functions can be used throughout the whole program and is said to have global scope. It can be said there is one global scope.

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

Ans: Once the function call returns, the local scope is no longer active, and the variables within it are destroyed.

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

Ans: Once the piece of code inside a function is executed, it usually returns some output value. This is done by using the syntax "return". It usually cannot be an expression.

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

Ans: If a function does not have a return statement, or if it has a return statement without an expression, the return value of a call to that function will be None.

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

Ans: In Python, if you want to make a function variable refer to a global variable, you can use the global keyword. By using the global keyword within a function, you indicate that a variable should be treated as a global variable rather than creating a new local variable with the same name.

10. What is the data type of None?

Ans: The data type of None in Python is NoneType. It is a special type of data type in Python.

11. What does the sentence `import re` do?

Ans: It tries to import a module called "areallyourpetsnamederic" in the program. However, I do not believe there is such module. So, it would show an import error.

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

Ans: `spam.bacon()` would call up the said feature after we have done: `import spam`.

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

Ans: We can use Exception Handling. We can specify when an error can occur in code and deal with them differently. We use `try` and `except`.

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

Ans: The `try` block is used to run the whole code and see if any exception is raised and in the `except` block the error can be specified which could result in crashing the code. It takes the flow of the program on once an exception is encountered.