

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

Solution

Functions reduce the need for duplicate code. This makes programs shorter, easier to read, and easier to update.

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

Solution

Code in a function runs when it is called.

3. What statement creates a function?

Solution

In Python, you define a function with the `def` keyword, then write the function identifier (name) followed by parentheses and a colon.

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

Solution

A function is a piece of code which enhanced the reusability and modularity of your program. It means that piece of code need not be written again. A function call means invoking or calling that function. Unless a function is called there is no use of that function.

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

Solution

There's only one global Python scope per program execution. This scope remains in existence until the program terminates and all its names are forgotten. Otherwise, the next time you were to run the program, the names would remember their values from the previous run.

More than one local scopes maybe present as per the number of functions created.

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

Solution

Each call of the function creates new local variables, and their lifetimes expire when the function returns to the caller.

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

Solution

The Python return statement is a key component of functions and methods. You can use the return statement to make your functions send Python objects back to the caller code.

Yes, it is possible to define conditional expressions in a function with a return value.

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

Solution

If no return statement appears in a function definition, control automatically returns to the calling function after the last statement of the called function is executed. In this case, the return value of the called function is undefined (None).

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

Solution

Normally, when you create a variable inside a function, that variable is local, and can only be used inside that function. To create a global variable inside a function, you can use the global keyword.

- 10. What is the data type of None?**

Solution

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) and only None can be None

- 11. What does the sentence `import areallyourpetsnamederic` do?**

Solution

It will search for a file/module named **areallyourpetsnamederic** and import all contents to be used in the current working file/code.

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

Solution

```
import spam
```

```
spam.bacon()
```

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

Solution

If an error occurs in a program, we don't want the program to unexpectedly crash on the user. Instead, error 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?

Solution

The try block lets you test a block of code for errors. The except block lets you handle the error.