

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

Ans.) Reduces redundancy in the code and makes it easier to perform repetitive tasks.

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

Ans.) We run the code in a function by calling it.

3. What statement creates a function?

Ans.) Def Statement

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

Ans.) A function is a block of code that does a particular operation and returns a result. It usually accepts inputs as parameters and returns a result. The parameters are not mandatory.

E.g:

```
Function add(a,b)
```

```
return a+ b
```

A function call is the code used to pass control to a function.

E.g.:

```
b = add(5,6)
```

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

Ans.) 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.

Local scope is created at the function call, not at the function definition, so you'll have as many different local scopes as function calls. This is true even if you call the same function multiple times, or recursively. Each call will result in a new local scope being created.

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

Ans.) When the execution of the function terminates (returns), the local variables are destroyed.

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

Ans.) A return is a value that a function returns to the calling script or function when it completes its task. Yes it is possible to have a return value in an expression.

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

Ans.) A Python function will always have a return value. There is no notion of procedure or routine in Python. So, if you don't explicitly use a return value in a return statement, or if you totally omit the return statement, then Python will implicitly return a default value for you that is None.

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

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

10. What is the data type of None?

Ans.) None is a data type of its own (NoneType) and only None can be None.

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

Ans.) imports the `areallyourpetsnamederic` module

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

Ans.) `spam.bacon()`

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

Ans.) /in Python, we use the try and except statements to handle errors. Whenever the code breaks down, an exception is thrown without crashing the program

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

Ans.) The try block is used to check some code for errors i.e the code inside the try block will execute when there is no error in the program. Whereas the code inside the except block will execute whenever the program encounters some error in the preceding try block.