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

Functions are advantageous to have in your programs because they allow you to break down complex problems into smaller, more manageable pieces. They also enable you to reuse code, make your code more organized and easier to read, and make it easier to debug.

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

The code in a function runs when it is called.

3.What statement creates a function?

The def statement is used to create a function in Python.

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

A function is a block of code that performs a specific task, while a function call is the code used to invoke or execute a function.

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

There is one global scope in a Python program, and local scopes are created whenever a function is called.

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

Variables in a local scope are destroyed when the function call returns.

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

A return value is the value that a function returns after it completes its task. 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?

If a function does not have a return statement, the return value of a call to that function is None.

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

You can make a function variable refer to the global variable by using the global keyword followed by the variable name inside the function. For example, if you have a global variable named spam and you want to use it inside a function, you can do the following:

python

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def my\_function():

global spam

print(spam)

10..What is the data type of None?

The data type of None is NoneType.

11.What does the sentence import areallyourpetsnamederic do?

The sentence import areallyourpetsnamederic is not a valid Python statement, and it will raise a syntax error.

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

If you had a bacon() feature in a spam module, you would call it as follows:

python

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import spam

spam.bacon()

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

You can use error handling techniques, such as the try-except block, to save a program from crashing if it encounters an error. By wrapping risky code in a try block and handling any exceptions that are raised in the except block, you can gracefully recover from errors and continue running the program.

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

The try clause is used to enclose code that might raise an exception, while the except clause is used to catch and handle any exceptions that are raised in the try block. The purpose of the try-except block is to provide a way to gracefully recover from errors and continue running the program.