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

A function is a block of reusable code that performs a specific task. You can call it anytime (n number of times) without rewriting the code again.

uses:

1) Reusability: if you want to write your name 10 times. Instead of typing it 10 times, you can just Use the name function, and it writes it for you. A white background with a black border

AI-generated content may be incorrect.

2) Readability: Functions make your code easier to read and understand. Instead of having a messy wall of code, you break it into labelled sections like chapters in a book. A white rectangular object with blue border

AI-generated content may be incorrect.

3) Maintainability: If you need to fix or update something, you only change it once inside the function. A white rectangular object with blue lines

AI-generated content may be incorrect.

4) Easier Testing: Functions can be tested separately to make sure they work properly. A screenshot of a computer code

AI-generated content may be incorrect.

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

The code inside a function runs only when the function is called, not when it’s defined. Function Call is when you run the function. A screenshot of a computer screen

AI-generated content may be incorrect.

3. What statement creates a function?

The def statement is used to create a function in Python. The keyword def stands for define. It tells Python that it’s going to define (create) a function now. A close-up of a computer screen

AI-generated content may be incorrect.

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

1. Function:

A function is a block of code you define once to do something but it doesn’t run until you call it. A white rectangular object with a black border

AI-generated content may be incorrect.

2. Function Call:

A function call is when you use or run the function it actually performs the task you defined. A white rectangular object with blue border

AI-generated content may be incorrect.

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

1. Global Scope:

The global scope is the top-most level of your Python program outside all functions. Variables defined here can be used anywhere in the program (unless shadowed by local ones).

2. Local Scope:

A local scope exists inside a function. Variables defined here can be used only inside that function.

A screenshot of a computer

AI-generated content may be incorrect.

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

Variables in a local scope are destroyed (forgotten) when the function finishes running (when it returns).

A screenshot of a computer program

AI-generated content may be incorrect.

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

1. Return Value:

A return value is the output that a function sends back after finishing its task, using the return keyword. A white rectangular object with black text

AI-generated content may be incorrect.

You can use a function’s return value just like any other value — inside expressions, print statements, equations, etc. A white rectangle with black text

AI-generated content may be incorrect.

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

If a function has no return statement, it returns None by default.

A white rectangular object with black text

AI-generated content may be incorrect.

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

A global variable is defined outside all functions and can be used anywhere in the program.

You use the global keyword inside the function to tell Python to use the global variable, not a new local variable.

If you assign a value to a variable inside a function, Python treats it as a new local variable, not the global one unless you use the global keyword. A screenshot of a computer program

AI-generated content may be incorrect.

10. What is the data type of None?

The data type of None is None-TypeA white rectangular object with blue edges

AI-generated content may be incorrect.

11. What does the sentence import areallyourpetsnamederic do?

The import statement is used to bring in modules (external files of code) so you can use their functions, variables, or classes.

So It tells to import a module named areallyourpetsnamederic.

A screenshot of a computer error

AI-generated content may be incorrect.

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

A spam.py module is a file containing Python function code that can be import into another file to reuse. A screenshot of a computer

AI-generated content may be incorrect.

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

we can use try and except blocks to catch errors and handle them gracefully, so your program doesn’t crash.

try Block: A block of code that might cause an error.

except Block: A block of code that runs only if an error happens inside the try block.

A screenshot of a computer code

AI-generated content may be incorrect.

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

try Block:

A block of code that might cause an error.

except Block:

A block of code that runs only if an error happens inside the try block.

A computer screen shot of a code

AI-generated content may be incorrect.