

Day 3 - Interview Questions

1. How do you take user input in Python?

You can take user input in Python using the `input()` function.

2. What is the return type of the `input()` function in Python?

The `input()` function returns a string.

3. How can you convert user input to an integer in Python?

You can convert user input to an integer using the `int()` function.

4. How can you prompt the user for multiple inputs in a single line and store them as separate variables?

You can use the `split()` method to split the user input into separate variables.

5. What are the two types of comments supported in Python?

Python supports two types of comments:

Single-line comments: These begin with a `#` character and extend to the end of the line.

Multi-line comments (docstrings): These are enclosed in triple quotes (`'''` or `"""`) and are often used for documenting functions, classes, or modules.

6. Explain how you can handle different types of user input, such as integers, floats, and strings, based on user prompts.

You can use conditional statements and appropriate conversion functions (e.g., `int()`, `float()`) to handle different types of user input based on the prompt and input validation.

7. What is the purpose of comments in Python code, and why are they important?

Answer: Comments in Python code serve as explanatory notes or documentation for the code. They are important for:

Explaining code logic to others (including future maintainers).

Adding context to code for easier understanding.

Providing documentation for functions, classes, and modules.

8. What is a program statement in Python?

A program statement in Python is a single line of code that performs a specific task or operation. Program statements are the building blocks of Python programs.

9. Explain the significance of indentation in Python program statements.

Indentation is used in Python to define block structure and scope. It is crucial for readability and determines which lines of code belong to a specific block or statement, such as within loops and functions.

10. Differentiate between an expression statement and an assignment statement in Python.

An expression statement is a line of code that evaluates an expression but doesn't necessarily store its result. For example, `print(5 + 3)` is an expression statement that calculates the sum but doesn't save it.

An assignment statement assigns a value to a variable, storing the result. For example, `result = 5 + 3` is an assignment statement.