**20 interview questions for Conditional statements in python**

1. What is a conditional statement in Python?

A conditional statement in Python is a type of statement that allows a program to make decisions based on whether certain conditions are true or false.

2. What are the keywords used to create a conditional statement in Python?

The keywords used to create a conditional statement in Python are 'if', 'else', and 'elif'.

3. How many types of conditional statements are there in Python?

There are two types of conditional statements in Python: if statement and if-else statement.

4. What is the syntax of the if statement in Python?

The syntax of the if statement in Python is:

if condition:

# code block to execute if the condition is true

5. How is the if-else statement used in Python?

The if-else statement in Python is used to execute one code block if a condition is true and a different code block if the condition is false. The syntax is:

if condition:

# code block to execute if the condition is true

else:

# code block to execute if the condition is false

6. How is the if-elif-else statement used in Python?

The if-elif-else statement in Python is used to test multiple conditions. It executes one code block if a condition is true and if it is not true, it tests the next condition until it finds one that is true. The syntax is:

if condition1:

# code block to execute if condition1 is true

elif condition2:

# code block to execute if condition2 is true

else:

# code block to execute if all conditions are false

7. What is the purpose of the pass statement in a conditional statement?

The pass statement is used as a placeholder in a code block when you don't want to add any code to it yet.

8. How do you use the 'not' operator in a conditional statement?

The 'not' operator is used to reverse the logical value of a condition. For example, if the condition is true, 'not' will make it false and vice versa.

9. How do you use the 'and' operator in a conditional statement?

The 'and' operator is used to combine two or more conditions so that the code block is executed only if all the conditions are true.

10. How do you use the 'or' operator in a conditional statement?

The 'or' operator is used to combine two or more conditions so that the code block is executed if at least one of the conditions is true.

11. Can you use multiple conditions in a single if statement?

Yes, you can use multiple conditions in a single if statement by combining them using the 'and' or 'or' operator.

12. How do you use the 'in' keyword in a conditional statement?

The 'in' keyword is used to check if a value is present in a sequence like a list or a tuple. For example, 'if x in my\_list:' will execute the code block if the value of x is present in my\_list.

13. How do you use the 'is' keyword in a conditional statement?

The 'is' keyword is used to check if two variables refer to the same object in memory.

14. What is the difference between 'is' and '==' in a conditional statement?

The 'is' keyword checks if two variables refer to the same object in memory, whereas the '==' operator checks if two variables have the same value.

15. How do you use nested conditional statements in Python?

Nested conditional statements are used when you need to check for multiple conditions within a condition. You can nest an if statement inside another if statement or an if-else statement.

16. How do you use the ternary operator in Python?

The ternary operator is a shortcut for writing an if-else statement in one line of code. The syntax is:

result = value\_if\_true if condition else value\_if\_false

17. How do you use the 'assert' statement in a conditional statement?

The 'assert' statement is used to check if a condition is true, and if it is not, it raises an AssertionError with a specific message.

18. What is short-circuit evaluation in Python?

Short-circuit evaluation is a feature of Python that allows the interpreter to skip evaluating certain expressions in a logical operation if the result can be determined based on the previous expressions.

19. What are the best practices to follow when writing conditional statements in Python?

The best practices for writing conditional statements in Python include:

* Writing clear and concise conditions.
* Avoiding unnecessary nested statements.
* Using parentheses to group conditions and make them more readable.
* Using descriptive variable names.

20. How do you debug conditional statements in Python?

To debug conditional statements in Python