Q1. What is the purpose of the try statement?

A try statement is used to catch exceptions that might be thrown as your program executes. You should use a try statement whenever you use a statement that might throw an exception That way, your program won't crash if the exception occurs. The statements that might throw an exception within a try block.

Q2. What are the two most popular try statement variations?

Try and Except statement is used to handle these errors within our code in Python. 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.

In some situations, you might want to run a certain block of code if the code block inside try ran without any errors. For these cases, you can use the optional else keyword with the try statement.

Q3. What is the purpose of the raise statement?

The raise keyword is used to raise an exception. You can define what kind of error to raise, and the text to print to the user.

Q4. What does the assert statement do, and what other statement is it like?

Assertions are statements that assert or state a fact confidently in your program.

Assertions are simply boolean expressions that check if the conditions return true or not. If it is true, the program does nothing and moves to the next line of code. However, if it's false, the program stops and throws an error.

Q5. What is the purpose of the with/as argument, and what other statement is it like?

with statement in Python is used in exception handling to make the code cleaner and much more readable. It simplifies the management of common resources like file streams.

It is similar to the try-finally

The as keyword is used to create an alias.