Q1. What is the purpose of the try statement?  
ans:  
The purpose of the try statement is to define a block of code in which exceptions or errors may occur. It allows for the handling of these exceptions, enabling error recovery and preventing the program from crashing.

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

The two most popular try statement variations are:

try-catch (try-except in Python): Used for catching and handling specific exceptions that may occur within the try block.

try-finally: Used for resource management to ensure code in the finally block is executed regardless of exceptions, commonly used for cleanup tasks.

Q3. What is the purpose of the raise statement?  
ans:  
The purpose of the **raise** statement is to intentionally trigger or raise an exception in a program, indicating that an exceptional condition has occurred and allowing for customized error handling.

Q4. What does the assert statement do, and what other statement is it like?  
ans:  
The **assert** statement in programming is used to test if a given condition is true. If the condition is false, it raises an **AssertionError** exception, which typically indicates a critical error in the program. It is similar in function to the **if** statement but is primarily used for debugging and testing purposes.

Q5. What is the purpose of the with/as argument, and what other statement is it like?  
Ans :  
The **with/as** statement is used for resource management in programming, particularly in languages like Python. Its primary purpose is to simplify the management of resources like file handles, network connections, or database connections by automatically handling their setup and cleanup. It is similar in function to the **try-finally** statement but provides a more concise and readable way to manage resources.