Assignment 95: Outline the steps that a typical Windows program follows during execution.

Here's a high-level outline of the typical steps a Windows program follows during execution:

1. **Initialization:**
   - The program is loaded into memory from disk.
   - Operating system allocates resources (memory, file handles, etc.) as required by the program.

2. **Entry Point:**
   - The program's entry point, usually the `main()` function in C/C++ programs or `WinMain()` in Windows GUI applications, is called by the operating system.

3. **Execution:**
   - The program executes its code sequentially, following the logic defined in its source files.
   - It may interact with the user, perform calculations, access files, and use system resources.

4. **Event Handling (GUI applications):**
   - If it's a graphical user interface (GUI) application, the program may enter an event handling loop where it waits for user input or system events.
   - Events like mouse clicks, keyboard inputs, window resizing, etc., are handled by event handlers defined within the program.

5. **Resource Cleanup:**
   - Once the program finishes execution or is explicitly terminated by the user or the operating system, it performs cleanup tasks.
   - This involves releasing allocated memory, closing open files, releasing other resources like handles to system objects, etc.

6. **Termination:**
   - The program exits, returning control to the operating system.
   - Any finalization tasks are completed, and the program's process is terminated.

7. **Optional Error Handling:**
   - Throughout execution, the program may encounter errors or exceptions.
   - Error handling mechanisms such as exception handling (try-catch blocks), return codes, or structured error handling (SEH) may be used to manage these situations.

8. **Final Resource Cleanup (OS level):**
   - The operating system may perform additional cleanup tasks related to the termination of the program's process.

- This could involve releasing any system resources allocated to the program, updating process status, etc.

9. **Operating System Maintenance:**
   - The operating system may perform maintenance tasks related to process management, memory management, etc., depending on its internal mechanisms and scheduling algorithms.

Overall, this is a simplified overview of the typical execution flow of a Windows program. The exact sequence and details may vary depending on the programming language, framework, and specific requirements of the application.