1. Gaming: Player Profile Management

Objective: Manage player profiles, game statistics, and achievements using callback functions, error handling, async/await, and ES6 features.

Part 1: Basic Features

Instructions:

- 1. Create a class Player with properties name, level, score, and achievements.
- 2. Implement methods to:
 - Update the player's profile (with error handling).
 - Add a new achievement (with callback function).
 - o Fetch player data from a simulated API (using async/await).
 - Save updated player data to a simulated API (using async/await).
- 3. **Use callback functions** to display updated profile and achievements after fetching and updating data.
- 4. Add error handling to manage simulated API request failures.

Part 2: Advanced Features

Objective: Enhance the player profile management system using advanced ES6 features, including modules, EventEmitter, and streams.

Instructions:

- 1. Organize code using ES6 modules:
 - Split the code into separate modules for Player, API calls, Logger, and Streams.
- 2. Add an event-driven logging system using EventEmitter:
 - o Log significant actions such as fetching data, updating profile, and saving data.
- 3. Implement stream operations:
 - o Create readable, writable, duplex, and transform streams to handle player data.
 - Use pipe() for efficient data flow.
- 4. **Enhance error handling** to manage stream operations and API request failures.