Assignment 10 - Inheritance

Inheritance Assignment: Library System

Problem Statement:

Create a basic library system using inheritance. Define the following classes:

1. **Base Class:** `LibraryItem`
   - **Fields**:
     - `title` (String) – stores the title of the item.
     - `yearPublished` (int) – stores the year of publication.
   - **Methods**:
     - `displayInfo()` – prints the title and year of publication.

2. **Derived Class:** `Book`
   - **Additional Field**:
     - `author` (String) – stores the author of the book.
   - **Methods**:
     - Override `displayInfo()` to also print the author of the book.

3. **Derived Class:** `Magazine`
   - **Additional Field**:
     - `issueNumber` (String) – stores the issue number of the magazine.
   - **Methods**:
     - Override `displayInfo()` to also print the issue number of the magazine.

Requirements:

- In the main method, create instances of `Book` and `Magazine`, assign values to their properties, and call their `displayInfo()` methods to demonstrate inheritance.

Hints:

- Use the `super` keyword in the constructor of `Book` and `Magazine` to initialize fields inherited from `LibraryItem`.

- Use method overriding to provide specific implementations of `displayInfo()` in `Book` and `Magazine`.