

## Task: Create a Library Management System

**Objective:** Build a program to manage a library with books and magazines. The system will allow users to borrow and return items.

### Concepts to Learn:

1. **Classes and Objects:** Learn how to use classes to model real-world items and actions.
2. **Inheritance:** Use inheritance to share common features between different types of items (like books and magazines).
3. **Methods:** Define methods to perform actions like borrowing and returning items.

### Steps to Complete the Task:

1. **Define Classes:**
  - **LibraryItem:** A base class for common features of library items.
  - **Book:** A class for books, inheriting from LibraryItem.
  - **Magazine:** A class for magazines, inheriting from LibraryItem.
2. **LibraryItem Class:**
  - **Attributes:**
    - `title`: The title of the item.
    - `is_borrowed`: A boolean indicating if the item is borrowed.
  - **Methods:**
    - `borrow()`: Marks the item as borrowed.
    - `return_item()`: Marks the item as returned.
    - `__str__()`: Provides a string representation of the item.
3. **Book Class:**
  - Inherits from `LibraryItem`.
  - **Additional Attributes:**
    - `author`: The author of the book.
  - **Additional Methods** (optional):
    - You might add special methods related to books if needed.
4. **Magazine Class:**
  - Inherits from `LibraryItem`.
  - **Additional Attributes:**
    - `issue_number`: The issue number of the magazine.
  - **Additional Methods** (optional):
    - You might add special methods related to magazines if needed.
5. **Library Class:**
  - **Attributes:**
    - `items`: A list to store all library items (books and magazines).
  - **Methods:**
    - `add_item(item)`: Adds a new item to the library.
    - `borrow_item(title)`: Finds and borrows an item by title.
    - `return_item(title)`: Finds and returns an item by title.
    - `list_items()`: Lists all items and their statuses.

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