Mira Library Management System (Python)

This is a simple yet functional Python project that simulates a Library Management System.

It uses dictionaries and lists to manage book and member records, simulating basic operations typically found in real-world library systems.

The system supports core features such as adding, updating, deleting, borrowing, and returning books, along with validating data integrity.

Test cases are also included to ensure each function performs as expected.

Features

Books Management

- Add new books with unique ISBNs

- Update existing book details such as title, author, genre, and total copies

- Delete books only when all copies are available (i.e., not borrowed)

- Prevent adding books with duplicate ISBNs

- Validate that genres belong to a predefined set of allowed categories

- Track how many copies are available versus originally added

Members Management

- Add new members with unique member IDs

- Prevent duplicate member registrations

- Remove members only if they have no books borrowed

- Track which books each member has borrowed

Borrowing & Returning

- Borrow books if they are available (copies > 0)