

11. Use property decorators (`@property`) for `available_books_count`.
12. Create an abstract base class (ABC) `Person`, inherited by `Member` and `Librarian`.
13. Demonstrate multiple inheritance by creating a `ResearchScholar` who is both `StudentMember` and `FacultyMember`.
14. Override `__str__` and `__repr__` methods for clean debugging outputs.
15. Add a Singleton pattern for the `Library` class (only one instance should exist).
16. Implement a Factory Method for creating different types of members (`StudentMember`, `FacultyMember`).
17. Add Method Chaining support, e.g., `library.add_book(...).register_member(...)`.
18. Create a mixin class that adds `to_json()` and `from_json()` methods for books and members.

### C. Error Handling & Robustness

19. Write custom exception classes: `BookNotAvailableError`, `MemberNotFoundError`.
20. Add a `try-except-else-finally` block around file reading/writing with proper error logging.