

UML Representation

operations.py

- books : dict
- members : list
- genre : list

```
+ add-book(isbn, title, amount,  
genre, total-copies) : str  
+ add-member(member-id, name) : str  
+ search-book(keyword) : list  
+ update-book(isbn, title, author, genre) : str  
+ borrow-book(member-id, isbn) : str  
+ return-book(member-id, isbn) : str  
+ delete-book(isbn) : str
```

Demo.py

Import functions from operations.py

```
+ add-book("001", "PythonBasics", "John Doe,  
"Fiction", 2)  
+ add-book("002", "AI 101", "Janosmith",  
"Sci-Fi", 3)  
+ add-member("M001", "Alice")  
+ add-member("M002", "Bob")  
+ search-book("Python")  
+ update-book("001", "Python Basic and Ed",  
"John Doe", "Fiction")  
+ borrow-book("M001", "001")  
+ return-book("M001", "001")  
+ delete-book("002")
```



operations.py

Test.py

Imports functions from Operations.py

```
+ assert add-book("101", "Learn Python", "Video",  
                  "Fiction", 2)  
+ assert add-member("A01", "Tom")  
+ assert borrow-book("A01", "101")  
+ assert return-book("A01", "101")  
+ assert delete-book("101")
```



Operations.py