

Python Programming Library System Demo

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Library System: Start with dummy data!

Program Options:

- 1) Add book
- 2) Print library books
- 3) Print books by prefix
- 4) Add user
- 5) Borrow book
- 6) Return book
- 7) Print users borrowed book
- 8) Print users

Enter your choice (from 1 to 8): 2

| | | | |
|------------------|-----------|---------------------|---------------------|
| Book name: math4 | - id: 100 | - total quantity: 3 | - total borrowed: 0 |
| Book name: math2 | - id: 101 | - total quantity: 5 | - total borrowed: 0 |
| Book name: math1 | - id: 102 | - total quantity: 4 | - total borrowed: 0 |
| Book name: math3 | - id: 103 | - total quantity: 2 | - total borrowed: 2 |
| Book name: prog1 | - id: 201 | - total quantity: 3 | - total borrowed: 0 |
| Book name: prog2 | - id: 202 | - total quantity: 3 | - total borrowed: 0 |

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Library System

Program Options:

- 1) Add book
- 2) Print library books
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- 4) Add user
- 5) Borrow book
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- 7) Print users borrowed book
- 8) Print users

Enter your choice (from 1 to 8): 3

Enter book name prefix: pro

Book name: prog1 - id: 201 - total quantity: 3 - total borrowed: 0

Book name: prog2 - id: 202 - total quantity: 3 - total borrowed: 0

Library System: Start with dummy data!

```
1) Add book
2) Print library books
3) Print books by prefix
4) Add user
5) Borrow book
6) Return book
7) Print users borrowed book
8) Print users
Enter your choice (from 1 to 8): 8
User name: mostafa ..... - id: 30301
  └─> Borrowed books:
  └─> Book name: math3 ..... - id: 103 - total quantity: 2 - total borrowed: 2

User name: ali ..... - id: 50501
User name: noha ..... - id: 70701
  └─> Borrowed books:
  └─> Book name: math3 ..... - id: 103 - total quantity: 2 - total borrowed: 2

User name: ashraf ..... - id: 90901
```

Library System: Handle wrong scenarios

Program Options:

- 1) Add book
- 2) Print library books
- 3) Print books by prefix
- 4) Add user
- 5) Borrow book
- 6) Return book
- 7) Print users borrowed book
- 8) Print users

Enter your choice (from 1 to 8): 5

Enter user name and book name

User name: mostafaaaaa

Invalid user name!

Enter user name and book name

User name: ali

Book name: math3

Failed to borrow the book

Enter your choice (from 1 to 8): 5

Enter user name and book name

User name: ali

Book name: math1

Program Options:

- 1) Add book
- 2) Print library books
- 3) Print books by prefix
- 4) Add user
- 5) Borrow book
- 6) Return book
- 7) Print users borrowed book
- 8) Print users

Enter your choice (from 1 to 8): 7

Book name: math1

List of users borrowed this book

User name: ali - id: 50501

Library System: Return book

Enter your choice (from 1 to 8): 6

Enter user name and book name

User name: ali

Book name: math2

This user did not borrow this book

Program Options:

1) Add book

2) Print library books

3) Print books by prefix

4) Add user

5) Borrow book

6) Return book

7) Print users borrowed book

8) Print users

Enter your choice (from 1 to 8): 6

Enter user name and book name

User name: mostafa

Book name: math3

Library System: Verify Correctness

8) Print users

Enter your choice (from 1 to 8): 8

User name: mostafa - id: 30301

User name: ali - id: 50501

—>Borrowed books:

—>Book name: math1 - id: 102 - total quantity: 4 - total borrowed: 1

User name: noha - id: 70701

—>Borrowed books:

—>Book name: math3 - id: 103 - total quantity: 2 - total borrowed: 1

User name: ashraf - id: 90901

Program Options:

1) Add book

2) Print library books

3) Print books by prefix

4) Add user

5) Borrow book

6) Return book

7) Print users borrowed book

8) Print users

Enter your choice (from 1 to 8): 2

Book name: math4 - id: 100 - total quantity: 3 - total borrowed: 0

Book name: math2 - id: 101 - total quantity: 5 - total borrowed: 0

Book name: math1 - id: 102 - total quantity: 4 - total borrowed: 1

Book name: math3 - id: 103 - total quantity: 2 - total borrowed: 1

Book name: prog1 - id: 201 - total quantity: 3 - total borrowed: 0

Book name: prog2 - id: 202 - total quantity: 3 - total borrowed: 0

Library System: Add Users & Books!

Enter your choice (from 1 to 8): 1

Enter book info:

Book name: C++ How to program

Book id: 11011F

Total quantity: 4

Program Options:

- 1) Add book
- 2) Print library books
- 3) Print books by prefix
- 4) Add user
- 5) Borrow book
- 6) Return book
- 7) Print users borrowed book
- 8) Print users

Enter your choice (from 1 to 8): 4

Enter user info:

User name: Mariam John

User id: ID20330304981

“Acquire knowledge and impart it to the people.”

“Seek knowledge from the Cradle to the Grave.”