Library System: Start with dummy data!

```
Program Options:
1) Add book
2) Print library books
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
```

Library System

```
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): 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
Print books by prefix
  Add user
5) Borrow book
6) Return book
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
Print books by prefix
4) Add user
5) Borrow book
6) Return book
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
Print library books
Print books by prefix
4) Add user
5) Borrow book
6) Return book
Print users borrowed book
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

```
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
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
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
```