

Run your program and follow the sample run below. Input values are shown in **bold underline**.

Test Run #1: Entering non-existing file then quit

Enter the book catalog file name: **book.txt**

File does not exist.

Library Book Management System

A) Add a book

L) List books

E) Edit a book

S) Search for a book

D) Delete a book

C) Checkout a book

R) Return a book

T) Display books totals

Q) Quit

Select an option: **q**

Goodbye!

Test Run #2: Entering an existing file then invalid menu option

Enter the book catalog file name: **books.txt**

3 books have been loaded

Library Book Management System

A) Add a book

L) List books

E) Edit a book

S) Search for a book

D) Delete a book

C) Checkout a book

R) Return a book

T) Display books totals

Q) Quit

Select an option: **H**

Invalid option. Please try again.

Library Book Management System

A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit
Select an option:

Test Run #3: Entering an existing file then list books

Enter the book catalog file name: books.txt
3 books have been loaded

Library Book Management System

A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit
Select an option: 1

Title	ID	Author	Year	Available
The Great Gatsby	1	F. Scott Fitzgerald	1925	Yes
To Kill a Mockingbird	2	Harper Lee	1960	No
The Catcher in the Rye	3	J.D. Salinger	1951	Yes

Library Book Management System

A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit
Select an option:

Test Run #4: search for books using id or title

Library Book Management System

A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit

Select an option: s

Enter book title or ID to search: 5

Book not found.

Library Book Management System

A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book

T) Display books totals

Q) Quit

Select an option: s

Enter book title or ID to search: 2

Title	ID	Author	Year	Available
To Kill a Mockingbird	2	Harper Lee	1960	No

1 books found

Library Book Management System

A) Add a book

L) List books

E) Edit a book

S) Search for a book

D) Delete a book

C) Checkout a book

R) Return a book

T) Display books totals

Q) Quit

Select an option: s

Enter book title or ID to search: the

Title	ID	Author	Year	Available
The Great Gatsby	1	F. Scott Fitzgerald	1925	Yes
The Catcher in the Rye	3	J.D. Salinger	1951	Yes

2 books found

Library Book Management System

A) Add a book

L) List books

E) Edit a book

S) Search for a book

D) Delete a book

C) Checkout a book

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R) Return a book
T) Display books totals
Q) Quit
Select an option:
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Test Run #5: display book totals

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*****
Library Book Management System
*****

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A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit
Select an option: t
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*** Summary of Books ***
# of Available Books      # of Checked Books      Total # of Books
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                2                1                3

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*****
Library Book Management System
*****

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A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit
Select an option:
```

Test Run #6: check-out a book which does not exist, is already checked out, or is available

Library Book Management System

- A) Add a book
- L) List books
- E) Edit a book
- S) Search for a book
- D) Delete a book
- C) Checkout a book
- R) Return a book
- T) Display books totals
- Q) Quit

Select an option: C

Enter book ID to checkout: 5

Book not found.

Library Book Management System

- A) Add a book
- L) List books
- E) Edit a book
- S) Search for a book
- D) Delete a book
- C) Checkout a book
- R) Return a book
- T) Display books totals
- Q) Quit

Select an option: C

Enter book ID to checkout: 2

Book #2 is already checked out.

Library Book Management System

- A) Add a book
- L) List books
- E) Edit a book

- S) Search for a book
- D) Delete a book
- C) Checkout a book
- R) Return a book
- T) Display books totals
- Q) Quit

Select an option: c

Enter book ID to checkout: 1

Book #1 is checked out successfully.

Library Book Management System

- A) Add a book
- L) List books
- E) Edit a book
- S) Search for a book
- D) Delete a book
- C) Checkout a book
- R) Return a book
- T) Display books totals
- Q) Quit

Select an option: 1

Title	ID	Author	Year	Available

The Great Gatsby	1	F. Scott Fitzgerald	1925	No
To Kill a Mockingbird	2	Harper Lee	1960	No
The Catcher in the Rye	3	J.D. Salinger	1951	Yes

Library Book Management System

- A) Add a book
- L) List books
- E) Edit a book
- S) Search for a book
- D) Delete a book
- C) Checkout a book
- R) Return a book

T) Display books totals

Q) Quit

Select an option:

Test Run #7: return a book which does not exist, is not checked out (available), or is checked out

Library Book Management System

A) Add a book

L) List books

E) Edit a book

S) Search for a book

D) Delete a book

C) Checkout a book

R) Return a book

T) Display books totals

Q) Quit

Select an option: R

Enter book ID to return: 6

Book not found.

Library Book Management System

A) Add a book

L) List books

E) Edit a book

S) Search for a book

D) Delete a book

C) Checkout a book

R) Return a book

T) Display books totals

Q) Quit

Select an option: R

Enter book ID to return: 3

Book #3 is already available.

Library Book Management System

- A) Add a book
- L) List books
- E) Edit a book
- S) Search for a book
- D) Delete a book
- C) Checkout a book
- R) Return a book
- T) Display books totals
- Q) Quit

Select an option: R

Enter book ID to return: 1

Book #1 is returned successfully.

Library Book Management System

- A) Add a book
- L) List books
- E) Edit a book
- S) Search for a book
- D) Delete a book
- C) Checkout a book
- R) Return a book
- T) Display books totals
- Q) Quit

Select an option: L

Title	ID	Author	Year	Available
The Great Gatsby	1	F. Scott Fitzgerald	1925	Yes
To Kill a Mockingbird	2	Harper Lee	1960	No
The Catcher in the Rye	3	J.D. Salinger	1951	Yes

Library Book Management System

- A) Add a book
- L) List books
- E) Edit a book

S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit
Select an option:

Test Run #8: add a book

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*****
Library Book Management System
*****

A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit
Select an option: a
Enter book ID: 1
Book with ID# 1 already exists.
*****
Library Book Management System
*****

A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit
Select an option: A
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Enter book ID: 4
Enter book title: Dummy Adventure
Enter book author: Unknown
Enter book year: 2024
Book added successfully.

Library Book Management System

- A) Add a book
 - L) List books
 - E) Edit a book
 - S) Search for a book
 - D) Delete a book
 - C) Checkout a book
 - R) Return a book
 - T) Display books totals
 - Q) Quit
- Select an option: L

Title	ID	Author	Year	Available
The Great Gatsby	1	F. Scott Fitzgerald	1925	Yes
To Kill a Mockingbird	2	Harper Lee	1960	No
The Catcher in the Rye	3	J.D. Salinger	1951	Yes
Dummy Adventure	4	Unknown	2024	Yes

Library Book Management System

- A) Add a book
 - L) List books
 - E) Edit a book
 - S) Search for a book
 - D) Delete a book
 - C) Checkout a book
 - R) Return a book
 - T) Display books totals
 - Q) Quit
- Select an option:

Test Run #9: edit a book

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*****  
Library Book Management System  
*****
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A) Add a book  
L) List books  
E) Edit a book  
S) Search for a book  
D) Delete a book  
C) Checkout a book  
R) Return a book  
T) Display books totals  
Q) Quit
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Select an option: e  
Enter book ID to edit: 5  
Book not found.
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*****  
Library Book Management System  
*****
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```
A) Add a book  
L) List books  
E) Edit a book  
S) Search for a book  
D) Delete a book  
C) Checkout a book  
R) Return a book  
T) Display books totals  
Q) Quit
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Select an option: E  
Enter book ID to edit: 4  
Enter new title: Unknown Adventure  
Enter new author: A. Mike  
Enter new year: 2025
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Book #4 is edited successfully.
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*****  
Library Book Management System  
*****
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- A) Add a book
- L) List books
- E) Edit a book
- S) Search for a book
- D) Delete a book
- C) Checkout a book
- R) Return a book
- T) Display books totals
- Q) Quit

Select an option: L

Title	ID	Author	Year	Available
The Great Gatsby	1	F. Scott Fitzgerald	1925	Yes
To Kill a Mockingbird	2	Harper Lee	1960	No
The Catcher in the Rye	3	J.D. Salinger	1951	Yes
Unknown Adventure	4	A. Mike	2025	Yes

Library Book Management System

- A) Add a book
- L) List books
- E) Edit a book
- S) Search for a book
- D) Delete a book
- C) Checkout a book
- R) Return a book
- T) Display books totals
- Q) Quit

Select an option:

Test Run #10: delete a book

Library Book Management System

- A) Add a book
- L) List books

E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit

Select an option: D

Enter book ID to delete: 5

Book not found.

Library Book Management System

A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit

Select an option: d

Enter book ID to delete: 4

Book with ID# 4 deleted successfully.

Library Book Management System

A) Add a book
L) List books
E) Edit a book
S) Search for a book
D) Delete a book
C) Checkout a book
R) Return a book
T) Display books totals
Q) Quit

Select an option: L

Title	ID	Author	Year	Available
The Great Gatsby	1	F. Scott Fitzgerald	1925	Yes
To Kill a Mockingbird	2	Harper Lee	1960	No
The Catcher in the Rye	3	J.D. Salinger	1951	Yes

Library Book Management System

- A) Add a book
- L) List books
- E) Edit a book
- S) Search for a book
- D) Delete a book
- C) Checkout a book
- R) Return a book
- T) Display books totals
- Q) Quit

Select an option: **g**

Goodbye!