student_profile.py M | save.txt | library.py | files.py | index.html M

library_manager > library.py > search_book_id

```python
# Name - Vivan Sethi
# Date - 2025-11-15
# Program - BCA(AI&DS)
# semester - 1st
# section - A
# Description - library management system


books={}
borrowing_records = {}
borrowed_books = []

def search_book_id () :
    search_id = input("Enter Book ID to search: ")
    if search_id in books:
        print("Book id:", search_id, end=" ")
        print("Name:", books[search_id]['name'], end=" ")
        print("Author:", books[search_id]['author'], end=" ")
        print("Copies:", books[search_id]['copies'])

def search_book_name () :
    search_name = input("Enter Book Name to search: ")
    found = False
    for book_id, details in books.items():
        if details['name'].lower() == search_name.lower():
            print("Book id:", book_id, end=" ")
            print("Name:", details['name'], end=" ")
            print("Author:", details['author'], end=" ")
            print("Copies:", details['copies'])
            found = True
    if not found:
        print("Book not found.")


while True :
    print("welcome to library management system !")
```

```
        print("Book not found.")


while True :
    print("welcome to library management system !")
    print("1. Add Book")
    print("2. View Book")
    print("3. Search Book")
    print("4. Borrow Book")
    print("5. Return Book")
    print("6. Exit")

    # initialize a dictionary to store book details
    option = int(input("Enter your choice: "))
    # perform operations based on user choice
    if option == 1:
        # enter book details
        entry = int(input("How many books do you want to add? "))
        for i in range(entry):
            id = input("Enter Book ID: ")
            name = input("Enter Book Name: ")
            author = input("Enter Author Name: ")
            copies = int(input("Enter Number of Copies: "))
            books[id] = {'name': name, 'author': author, 'copies': copies}
            print("Book added successfully.")


    if option == 2 :
    # view all books
        for book in books:
            print("Book id:", book, end=" ")
            print("Name:", books[book]['name'], end=" ")
            print("Author:", books[book]['author'], end=" ")
            print("Copies:", books[book]['copies'])
```

```python
if option == 1:
    # enter book details
    entry = int(input("How many books do you want to add? "))
    for i in range(entry):
        id = input("Enter Book ID: ")
        name = input("Enter Book Name: ")
        author = input("Enter Author Name: ")
        copies = int(input("Enter Number of Copies: "))
        books[id] = {'name': name, 'author': author, 'copies': copies}
        print("Book added successfully.")

if option == 2 :
# view all books
    for book in books:
        print("Book id:", book, end=" ")
        print("Name:", books[book]['name'], end=" ")
        print("Author:", books[book]['author'], end=" ")
        print("Copies:", books[book]['copies'])


if option == 3 :
    print("Search Book by: ")
    print("1. Book ID")
    print("2. Book Name")
    type_choice = int(input("Enter your choice: "))
    #search book by Book ID
    if type_choice == 1 :
        search_book_id()
    # search by book title
    search_book_name()


if option == 4 :
    # borrow book
    borrow_id = input("Enter Book ID to borrow: ")
```

```
75              search_book_id()
76          # search by book title
77          search_book_name()
78
79
80      if option == 4 :
81          # borrow book
82          borrow_id = input("Enter Book ID to borrow: ")
83          name = input("Enter Name of the student: ")
84          # check if book is available
85          if borrow_id in books and books[borrow_id]['copies'] > 0:
86              books[borrow_id]['copies'] -= 1
87              # add to borrowing records
88              borrowing_records[name] = borrow_id
89              print("Book borrowed successfully.")
90          # if book not available
91          else:
92              print("Book not available for borrowing.")
93
94
95      if option == 5 :
96          # return book
97          return_id = input("Enter Book ID to return: ")
98          name = input("Enter Name of the student: ")
99          # check if the book was borrowed
100         if name in borrowing_records and borrowing_records[name] == return_id:
101             books[return_id]['copies'] += 1
102             del borrowing_records[name]
103             print("Book returned successfully.")
104             for i in borrowing_records:
105                 print("name :",i, end=" ")
106                 print("Book ID :",borrowing_records[i])
107         else:
108             print("No record of this book being borrowed by you.")
109
110
```

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            books[borrow_id]['copies'] -= 1
            # add to borrowing records
            borrowing_records[name] = borrow_id
            print("Book borrowed successfully.")
        # if book not available
        else:
            print("Book not available for borrowing.")


    if option == 5 :
        # return book
        return_id = input("Enter Book ID to return: ")
        name = input("Enter Name of the student: ")
        # check if the book was borrowed
        if name in borrowing_records and borrowing_records[name] == return_id:
            books[return_id]['copies'] += 1
            del borrowing_records[name]
            print("Book returned successfully.")
            for i in borrowing_records:
                print("name :",i, end=" ")
                print("Book ID :",borrowing_records[i])
        else:
            print("No record of this book being borrowed by you.")


    if option == 6:
        print("Exiting the system. Goodbye!")
        break
```

```
PS C:\Users\Lenovo\OneDrive\Documents\GitHub> & C:/Users/Lenovo/AppData/Local/Programs/Python/Python312
/python.exe c:/Users/Lenovo/OneDrive/Documents/GitHub/library_manager/library.py
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 1
How many books do you want to add? 5
Enter Book ID: B001
Enter Book Name: Test
Enter Author Name: Test
Enter Number of Copies: 3
Book added successfully.
Enter Book ID: B002
Enter Book Name: Maths
Enter Author Name: ncert
Enter Number of Copies: 5
Book added successfully.
Enter Book ID: B003
Enter Book Name: atlas
Enter Author Name: pramod
Enter Number of Copies: 6
Book added successfully.
Enter Book ID: B004
Enter Book Name: Maths
Enter Author Name: R.D Sharma
Enter Number of Copies: 4
Book added successfully.
Enter Book ID: B005
Enter Book Name: Dictionary
Enter Author Name: Oxford
Enter Number of Copies: 2
Book added successfully.
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
```

```
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 2
Book id: B001 Name: Test Author: Test Copies: 3
Book id: B002 Name: Maths Author: ncert Copies: 5
Book id: B003 Name: atlas Author: pramod Copies: 6
Book id: B004 Name: Maths Author: R.D Sharma Copies: 4
Book id: B005 Name: Dictionary Author: Oxford Copies: 2
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 3
Enter Book ID to search: B003
Book id: B003 Name: atlas Author: pramod Copies: 6
Enter Book Name to search: Maths
Book id: B002 Name: Maths Author: ncert Copies: 5
Book id: B004 Name: Maths Author: R.D Sharma Copies: 4
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 4
Enter Book ID to borrow: B004
Enter Name of the student: Vivan
Book borrowed successfully.
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
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6. Exit
Enter your choice: 4
Enter Book ID to borrow: B004
Enter Name of the student: Vivan
Book borrowed successfully.
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 2
Book id: B001 Name: Test Author: Test Copies: 3
Book id: B002 Name: Maths Author: ncert Copies: 5
Book id: B003 Name: atlas Author: pramod Copies: 6
Book id: B004 Name: Maths Author: R.D Sharma Copies: 3
Book id: B005 Name: Dictionary Author: Oxford Copies: 2
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 4
Enter Book ID to borrow: B005
Enter Name of the student: Dev
Book borrowed successfully.
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 2
Book id: B001 Name: Test Author: Test Copies: 3
Book id: B002 Name: Maths Author: ncert Copies: 5
Book id: B003 Name: atlas Author: pramod Copies: 6
Book id: B004 Name: Maths Author: R.D Sharma Copies: 3
```

```
Book id: B001 Name: Test Author: Test Copies: 3
Book id: B002 Name: Maths Author: ncert Copies: 5
Book id: B003 Name: atlas Author: pramod Copies: 6
Book id: B004 Name: Maths Author: R.D Sharma Copies: 3
Book id: B005 Name: Dictionary Author: Oxford Copies: 1
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 5
Enter Book ID to return: B005
Enter Name of the student: Dev
Book returned successfully.
name : Vivan Book ID : B004
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 5
Enter Book ID to return: B004
Enter Name of the student: Vivan
Book returned successfully.
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 6
Enter your choice: 5
Enter Book ID to return: B004
Enter Name of the student: Vivan
Book returned successfully.
welcome to library management system !
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```
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 6
Enter your choice: 5
Enter Book ID to return: B004
Enter Name of the student: Vivan
Book returned successfully.
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 6
Enter Name of the student: Vivan
Book returned successfully.
welcome to library management system !
1. Add Book
2. View Book
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 6
3. Search Book
4. Borrow Book
5. Return Book
6. Exit
Enter your choice: 6
Enter your choice: 6
Exiting the system. Goodbye!
PS C:\Users\Lenovo\OneDrive\Documents\GitHub>
```