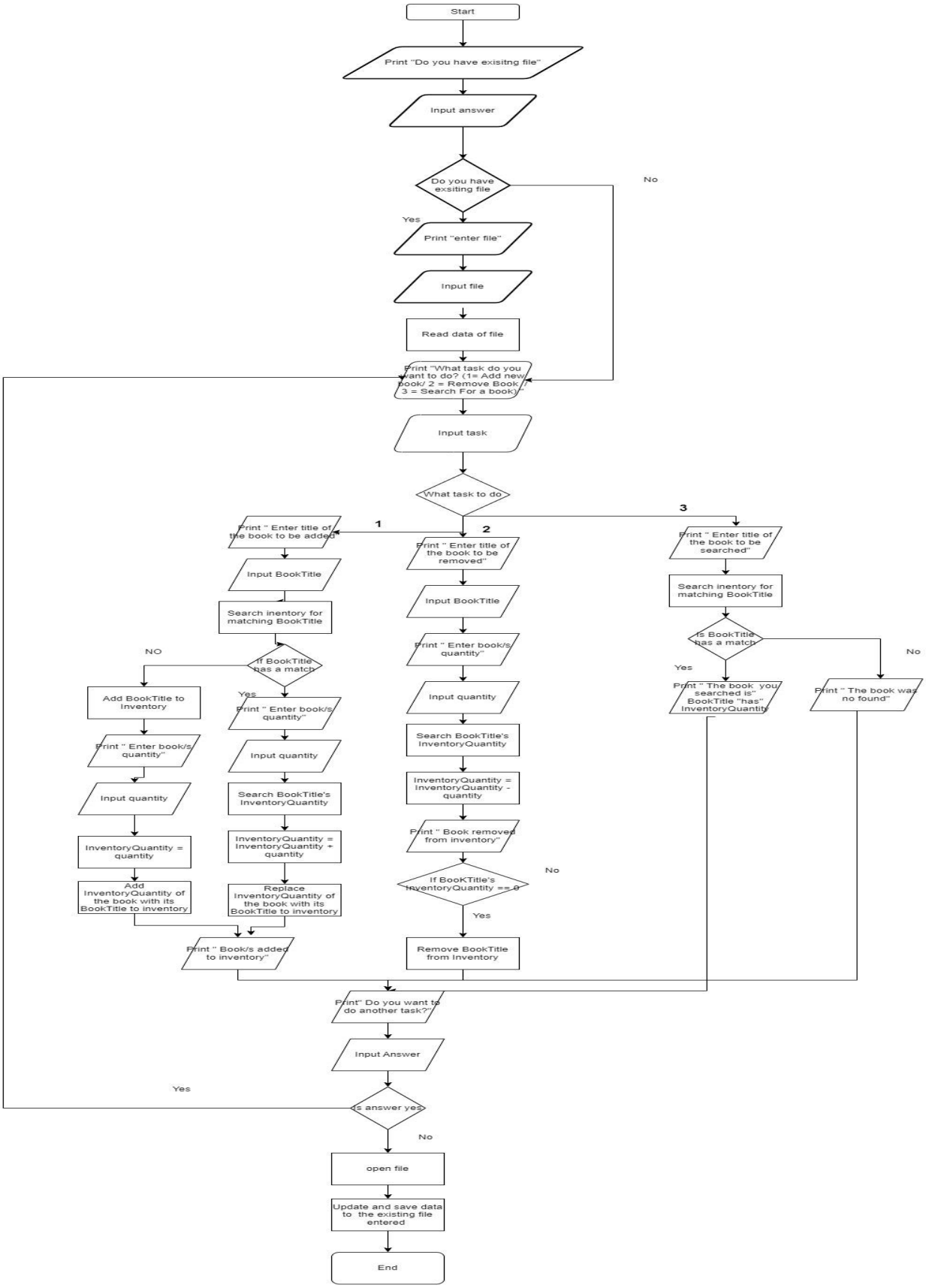
Flowchart


Start
Print "Do you have exisitng file"
Input answer
Do you have exsiting file
No
Yes
Print "enter file"
Input file
Read data of file
Print "What task do you want to do? (1= Add new book/ 2 = Remove Book / 3 = Search For a book)"
Input task
What task to do
1
2
3
Print " Enter title of the book to be added
Input BookTitle
Search inentory for matching BookTitle
If BookTitle has a match
NO
Yes
Add BookTitle to Inventory
Print " Enter book/s quantity"
Input quantity
InventoryQuantity = quantity
Add InventoryQuantity of the book with its BookTitle to inventory
Print " Enter book/s quantity"
Input quantity
Search BookTitle's InventoryQuantity
InventoryQuantity = InventoryQuantity + quantity
Replace InventoryQuantity of the book with its BookTitle to inventory
Print " Book/s added to inventory"
Print " Enter title of the book to be removed"
Input BookTitle
Print " Enter book/s quantity"
Input quantity
Search BookTitle's InventoryQuantity
InventoryQuantity = InventoryQuantity - quantity
Print " Book removed from inventory"
If BookTitle's InventoryQuantity == 0
No
Yes
Remove BookTitle from Inventory
Print " Enter title of the book to be searched"
Search inentory for matching BookTitle
Is BookTitle has a match
Yes
No
Print " The book you searched is" BookTitle "has" InventoryQuantity
Print " The book was no found"
Print" Do you want to do another task?"
Input Answer
Is answer yes
Yes
No
open file
Update and save data to the existing file entered
End

Running Code:

```
class Book:
    def __init__(self, title, quantity):
        self.title = title
        self.quantity = quantity

    def __str__(self):
        return f"{self.title}"

class Inventory:
    def __init__(self):
        self.books = []

    def add_book(self, book):
        self.books.append(book)

    def remove_book(self, book):
        self.books.remove(book)

    def search_books(self, search_term):
        return [book for book in self.books if search_term.lower() in book.title.lower()]

    def display_books(self):
        for book in self.books:
            print(book)



def main():
    library_inventory = Inventory()
```

```
while True:
    print("Enter 1 to add a book")
    print("Enter 2 to remove a book")
    print("Enter 3 to search for a book")
    print("Enter 0 to exit")

    choice = input("What task do you want to do? ")

    if choice == "1":
        title = input("Enter title of the book to be added: ")
        quantity = int(input("Enter book/s quantity: "))
        book = Book(title, quantity)
        library_inventory.add_book(book)
        print("Book/s added to inventory!")

    elif choice == "2":
        title = input("Enter title of the book to be removed: ")
        matching_books = [book for book in library_inventory.books if book.title == title]
        if len(matching_books) == 0:
            print("Book not found.")
        else:
            book_to_remove = matching_books[0]
            library_inventory.remove_book(book_to_remove)
            print("Book removed from inventory")

    elif choice == "3":
        search_term = input("Enter title of the book to be searched: ")
        matching_books = library_inventory.search_books(search_term)
        if len(matching_books) == 0:
            print("The book was not found.")
```

```
            else:
                print("Matching books:")
                for book in matching_books:
                    print(book)
        elif choice == "0":
            print("Exiting program.")
            break

        else:
            print("Invalid choice. Please try again.")

        while True:
            answer = input("Do you want to do another task? (y/n): ")
            if answer.lower() == "n":
                print("Exiting program.")
                return
            elif answer.lower() == "y":
                break
            else:
                print("Invalid input. Please enter y or n.")

if __name__ == "__main__":
    main()
```