

Library Management Problem

```
public class Book {
    private int bookId;
    private String title;
    private boolean isAvailable;

    // Constructor to initialize the book details
    public Book(int bookId, String title){
        this.bookId=bookId;
        this.title=title;
        this.isAvailable = true; // Book is Available
    }

    //Method to rent a book
    public void rentBook() throws Exception {
        if(!isAvailable) {    // If the book is already rented
            throw new Exception("Book is not available");
        }
        isAvailable=false;    // Mark the book as rented
        System.out.println(title + " has been rented
successfully");
    }

    //Method to return a book
    public void returnBook(){
        isAvailable=true;    //Marking book as Available
        System.out.println(title + " has been returned and is
now available");
    }

    //getter for book title
    public String getTitle(){
        return title;
    }
}
```

```

public class LibrarySystem {
    public static void main(String[] args) {
        // Creating few book objects
        Book book1 = new Book(1, "Java Programming");
        Book book2 = new Book(2, "Python");
        Book book3 = new Book(3, "C# Programming");
        try {
            //Renting book 1
            book1.rentBook();
            //Trying to rent a rented book
            book1.rentBook(); // will throw an exception
        } catch (Exception e) {
            //Handling the exception if the book is already
rented
            System.out.println(e.getMessage());
        }

        //Return a book
        book1.returnBook();

        // trying to rent it again after returning
        try {
            book1.rentBook();
        } catch (Exception e) {
            System.out.println(e.getMessage());
        }

        //Trying to rent other books as well
        try {
            book2.rentBook(); // rent book2
            book3.rentBook(); // rent book3
        } catch (Exception e) {
            System.out.println(e.getMessage());
        }
    }
}

```

Steps to add project on github with IDE:

1. Download and install git with -> [Git - Downloads](#)
2. Verify installation -> git -version
3. File -> Settings -> Version Control -> Git -> set the path for git executable(C:\Program Files\Git\bin\git.exe)-> Click on Test -> click OK
4. Login into your github account -> create new repository
5. Main Menu -> VCS -> Enable Version Control Integration
6. Select the version control system -> GIT -> OK
7. Right click on project main folder -> scroll down -> GIT -> Add
(ADD -> COMMIT -> PUSH)
8. Main Menu -> Git -> Commit -> Add commit message -> Commit
9. If getting warnings just ignore
10. Linking it with repo
11. Right click on project folder -> Scrolling down -> Git -> Scrolling down -> Manage remotes -> Click on + button -> keep origin -> copy repo' s URL and paste it there -> OK
12. Now Pushing -> Main Menu -> Git -> push -> push
13. Check in your git account