

1. Develop the classes

Student	String name String id String department float cgpa	Member fields declare private. use properties to access
	2 Constructor (Empty, valued)	
	showInfo	

Account	String accName String acid int balance	Member fields declare private use properties to access
	2 Constructor (Empty, valued)	
	Deposit(int amount)	
	Withdraw(int amount)	
Extended part		
	Transfer(int amount, Account receiver)	Transfer amount from one account to another account

Book	String bookName String bookAuthor String bookId String bookType int bookCopy // how many copy	Member fields declare private. use properties to access
	2 Constructor (Empty, valued) void ShowInfo() void AddBookCopy(int x) // how many copy of book	

Library Reuse Book Class	String libName String libAddress Book [] listOfBook int totalBook;	Member fields declare private. use properties to access
	2 constructors (empty and valued) void ShowLibInfo() // show library info void ShowAllBooks() //show all book info as well void AddNewBook(Book book) // add a new book into lib void DeleteBook(Book book) // delete book object void AddNewBookCopy(Book book, int copy)	

2. Now we want to reuse our **Account class. The scenario is every student object has an account.**

Tasks that you have to do:

- I. If a student deposit a book after certain duration then for each day 10 taka will be charged by the library authority.
- II. Student can pay that amount (charged amount) from his/her bank account to the library account. So the library also has an account.
- III. Show the total amount a student paid to the library.
- IV. Show the total amount library gets from the students (total charged amount).
- V. But if any student has any valid reason for delay then the librarian can excuse the charged amount. Librarian can excuse full or partially (%).

3. In this program we want to reuse our last developed **Library and **Student** Class. Our objective is to develop the scenario, where student can take maximum 5 books (for 5 days each) at a time from the library, and return these books.**

Tasks that you have to do:

- I. Show all the borrowed book information of a student from student class
- II. Show all the student name and book information from library class, which are currently borrowed by students.
- III. Step 2
- IV. Preserve borrowed history of student object, which he/she takes in his/her lifetime.

Preserve borrowed history of book objects that are taken by students.