



University of Central Punjab

(Incorporated by Ordinance No. XXIV of 2002 promulgated by Government of the Punjab)
FACULTY OF INFORMATION TECHNOLOGY

Introduction to Database Systems

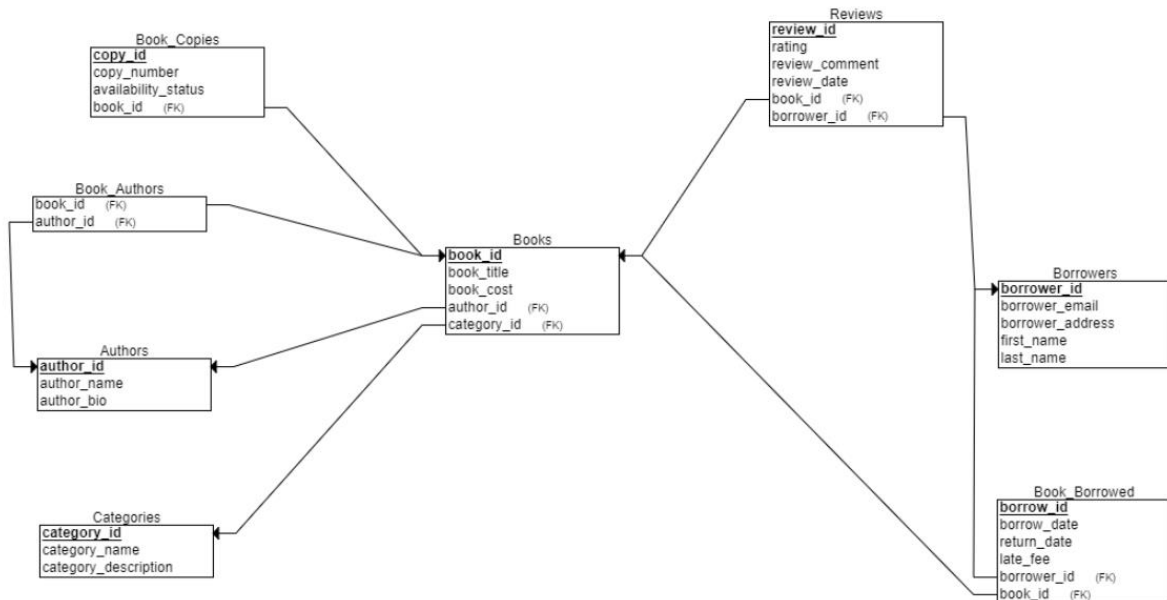
Assignment 3

Total Marks: (5*14 = 70)

Submission:

1. Submit the Hardcopy of your assignment.
2. The deadline for hardcopy is **Monday June 12, 2023**.
3. No late and retake submissions will be entertained, otherwise there will be plenty of deduction in marks.

Below is the Relational Schema of a Library Management System.



Perform the following queries

1. Retrieve all combinations of books and authors.
2. Find all authors along with the titles of books they have written, including authors without any books.
3. Retrieve the top 5 most borrowed books along with the total number of times each book has been borrowed.
4. Retrieve the average rating for each author's books, along with the author's name and the number of books they have written.
5. Write a query to find the category with the second highest average book cost with the number of books in that category.
6. Retrieve the average rating for books in Fiction category that have received at least 3 reviews.
7. Find the list of books with the number of available copies. Display "Available" if there are more than 0 copies otherwise display "Not Available".
8. Find the list of books with categories and display "Low" if the book cost is less than \$50, "Medium" if it is between \$50 and \$100, and "High" if it is greater than \$100.
9. Display all book titles that have a rating higher than all books in the Mystery category.
10. Find the books along with titles of related books by the same author.
11. Retrieve the book title with the names of authors and average rating of each author's books, who have written more than 3 books.
12. Display the books and their authors that have same rating as the book with highest rating.
13. Write a query to display the books with their total cost including 10% discount.
14. Write a query to display the full names of borrowers with total number of books borrowed by each.