## **Library Management System**

## **Relational Schema:**

```
Tables:
authentication system(<u>login id</u>,passwords)
member id, first name, middle name, last name, age, email id, phone no,
no of books allowed)
Librarian(<u>librarian_id</u>, first_name,middle_name,last_name,age,email_id,phone_no)
reports(member_id,book_id, magazine_id,journal_id,thesis_id, tr_id, return_date,issue_date,
due amount)
books(<u>book_id</u>,ISBN,Title,category,editions,borrows_reference)
journals(<u>journal_id</u>,title,category)
magazines(magazine id,title,category)
thesis(thesis id,title,category)
technical_reports(<u>tr_id</u>,title,category)
citation(<u>citation id</u>,source,reference)
publisher(publisher_id,first_name,middle_name,last_name,publication_date)
author(<u>author id</u>,first name,middle name,last name)
copies(copy_id,borrow_time_limit,is_borrowed,floor_number,room_number,aisle_number)
Relations:
login_to(<u>librarian_id</u>,login_id)
member_reports(Member_id)
manages(<u>librarian id</u>,member id)
keeps track of(<u>librarian id,member id</u>)
```

```
borrows(member_id,book_id,magazine_id,journal_id,thesis_id,tr_id)
maintains(librarian_id,book_id,magazine_id,journal_id,thesis_id,tr_id)
cites(citation_id,book_id,magazine_id,journal_id,thesis_id,tr_id)
publishes(publisher_id,book_id,magazine_id,journal_id,thesis_id,tr_id)
authors(author_id,book_id,magazine_id,journal_id,thesis_id,tr_id)
doc_copy_info(copy_id,book_id,magazine_id,journal_id,thesis_id,tr_id)
member_copy_info(copy_id,member_id)
monitors(copy_id,librarian_id)
```