

## **DBMS - Mini Project Report**

**Project Title - Library Management System**



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## **Short Description and Scope of the Project**

The purpose of library management system is to operate a library with efficiency and at reduced costs. This system being entirely automated streamlines all the tasks involved in operations of library. The activities of book purchasing, cataloguing, indexing, circulation recording and stock checking are done by software. The software eliminates the need for repetitive manual work and minimizes the chances of errors.

The library management system software helps in reducing operational costs. Managing a library manually is labour intensive and an immense amount of paperwork is involved. An automated system reduces the need for manpower and stationery.

The system saves time for both the user and the librarian. With just a click user can search for books available in the library. The librarian can answer queries with ease regarding the availability of books. Adding, removing or editing the database is a simple process. Adding new members or cancelling existing memberships can be done with ease. Stock checking and verification of books in the library can be done within a few hours. The automated system saves a considerable amount of time as opposed to the manual system.

The library management system software makes the library a smart one by organizing the books systematically by author, title and subject. This enables users to search for books quickly and effortlessly.

Students need access to authentic information. An advanced organized library is an integral part of any educational institution. In this digital age a web based library management system would be ideal for students who can access the library's database on their smartphones.

## ER Diagram

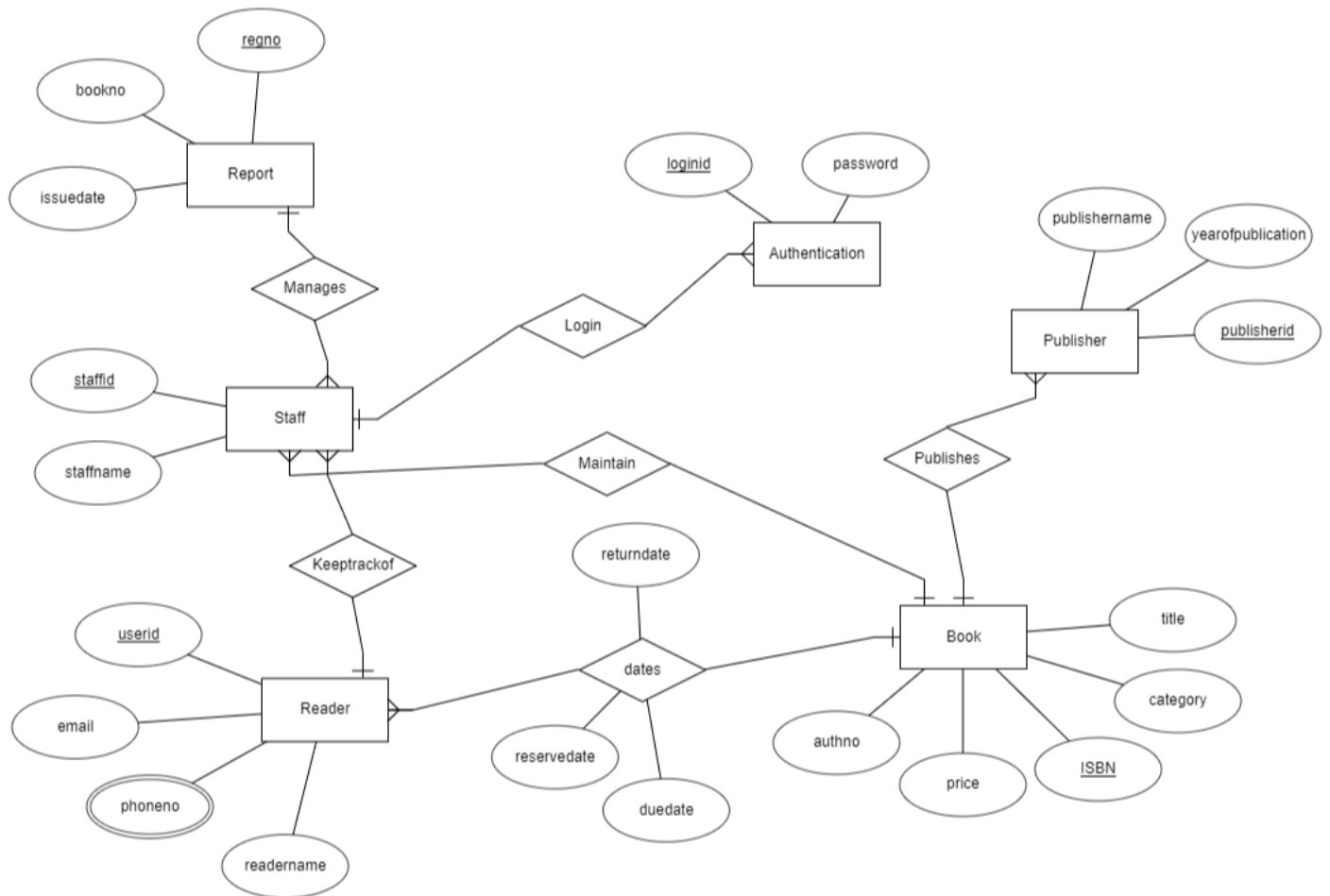


Fig 2: ER Diagram – Library Management System

## Relational Schema

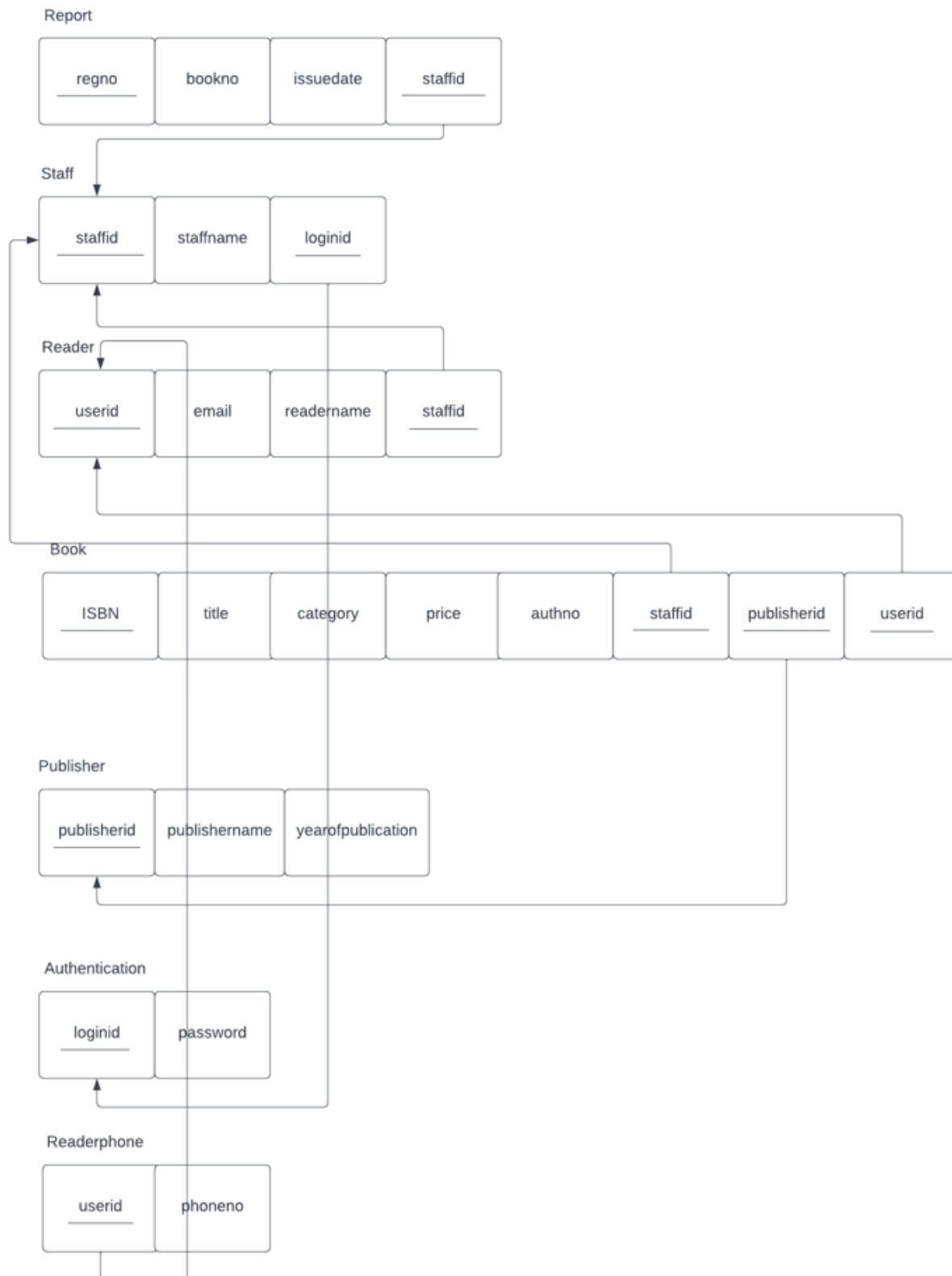


Fig 3: Relational Schema – Library Management System

## DDL Statements to build the database

Creating database peslug20cs479\_library\_management\_system and accessing this database

Creating table Report

```
MariaDB [(none)]> create database peslug20cs479_library_management_system;  
Query OK, 1 row affected (0.002 sec)  
  
MariaDB [(none)]> use peslug20cs479_library_management_system;  
Database changed  
MariaDB [peslug20cs479_library_management_system]> create table Report (regno int,bookno int,issuedate date,staffid varchar(10));  
Query OK, 0 rows affected (0.020 sec)
```

*Fig 4.1.1*

Creating table Staff

```
MariaDB [peslug20cs479_library_management_system]> create table Staff (staffid varchar(10),staffname varchar(20),loginid varchar(10));  
Query OK, 0 rows affected (0.016 sec)
```

*Fig 4.1.2*

Creating table Reader

```
MariaDB [peslug20cs479_library_management_system]> create table Reader (userid varchar(10),email varchar(30),readername varchar(20),staffid varchar(10));  
Query OK, 0 rows affected (0.029 sec)
```

*Fig 4.1.3*

Creating table Book

```
MariaDB [peslug20cs479_library_management_system]> create table Book (ISBN varchar(10),title varchar(20),category varchar(10),price int,staffid varchar(10),publisherid varchar(10),userid varchar(10));  
Query OK, 0 rows affected (0.027 sec)
```

*Fig 4.1.4*

Creating table Publisher

```
MariaDB [peslug20cs479_library_management_system]> create table Publisher (publisherid varchar(10),publishername varchar(20),yearofpublication int);  
Query OK, 0 rows affected (0.032 sec)
```

*Fig 4.1.5*

### Creating table Authentication

```
MariaDB [pes1ug20cs479_library_management_system]> create table Authentication (loginid varchar(10),password varchar(15));  
Query OK, 0 rows affected (0.022 sec)
```

*Fig 4.1.6*

### Creating table Readerphone

```
MariaDB [pes1ug20cs479_library_management_system]> create table Readerphone (userid varchar(10),phoneno char(10));  
Query OK, 0 rows affected (0.028 sec)
```

*Fig 4.1.7*

### Adding primary key for table Report

```
MariaDB [pes1ug20cs479_library_management_system]> alter table Report add primary key(regno,staffid);  
Query OK, 0 rows affected (0.035 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.2.1*

### Adding primary key for table Staff

```
MariaDB [pes1ug20cs479_library_management_system]> alter table Staff add primary key(staffid,loginid);  
Query OK, 0 rows affected (0.043 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.2.2*

### Adding primary key for table Reader

```
MariaDB [pes1ug20cs479_library_management_system]> alter table Reader add primary key(userid,staffid);  
Query OK, 0 rows affected (0.033 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.2.3*

### Adding primary key for table Book

```
MariaDB [pes1ug20cs479_library_management_system]> alter table Book add primary key(ISBN,staffid,publisherid,userid);  
Query OK, 0 rows affected (0.039 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.2.4*

## Adding primary key for table Publisher

```
MariaDB [pes1ug20cs479_library_management_system]> alter table Publisher add primary key(publisherid);  
Query OK, 0 rows affected (0.058 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Figure 4.2.5*

## Adding primary key for table Authentication

```
MariaDB [pes1ug20cs479_library_management_system]> alter table Authentication add primary key(loginid);  
Query OK, 0 rows affected (0.055 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.2.6*

## Adding primary key for table Readerphone

```
MariaDB [pes1ug20cs479_library_management_system]> alter table Readerphone add primary key(userid);  
Query OK, 0 rows affected (0.062 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.2.7*

## Adding foreign key for table Report

```
MariaDB [pes1ug20cs479_library_management_system]> alter table Report add foreign key(staffid) references Staff(staffid);  
Query OK, 0 rows affected (0.067 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.3.1*

## Adding foreign key for table Staff

```
MariaDB [pes1ug20cs479_library_management_system]> alter table Staff add foreign key(loginid) references Authentication(loginid);  
Query OK, 0 rows affected (0.057 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.3.2*

## Adding foreign key for table Reader

```
MariaDB [pes1ug20cs479_library_management_system]> alter table Reader add foreign key(staffid) references Staff(staffid);  
Query OK, 0 rows affected (0.044 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.3.3*



## Adding foreign key for table Staff

```
MariaDB [peslug20cs479_library_management_system]> alter table Book add foreign key(staffid) references Staff(staffid),add foreign key(publisherid) references Publisher(publisherid),add foreign key(userid) references Reader(userid);  
Query OK, 0 rows affected (0.051 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.3.4*

## Adding foreign key for table Readerphone

```
MariaDB [peslug20cs479_library_management_system]> alter table Readerphone add foreign key(userid) references Reader(userid);  
Query OK, 0 rows affected (0.056 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

*Fig 4.3.5*

## Populating the Database

Stop checking for foreign key constraints

```
MariaDB [peslug20cs479_library_management_system]> select @@foreign_key_checks;
+-----+
| @@foreign_key_checks |
+-----+
| 0 |
+-----+
1 row in set (0.000 sec)
```

*Fig 5.1*

Inserting into table Report

```
MariaDB [peslug20cs479_library_management_system]> insert into Report values (12345,87,'2022-10-30','staff159'),(89895,23,'2022-11-28','staff123'),(90931,28,'2022-8-17','staff619'),(47883,66,'2022-12-20','staff179'),(93840,37,'2022-10-15','staff896');
Query OK, 5 rows affected (0.004 sec)
Records: 5 Duplicates: 0 Warnings: 0
```

*Fig 5.2*

Inserting into table Staff

```
MariaDB [peslug20cs479_library_management_system]> insert into Staff values ('staff159','Ram','login9093'),('staff179','Raju','login8343'),('staff678','Krishna','login2321'),('staff999','Ravan','login5767'),('staff896','Bheeshma','login9981');
Query OK, 5 rows affected (0.016 sec)
Records: 5 Duplicates: 0 Warnings: 0
```

*Fig 5.3*

Inserting into table Reader

```
MariaDB [peslug20cs479_library_management_system]> insert into Reader values ('user4341','user4341@gmail.com','Pawan Kumar','staff159'),('user9037','user9037@gmail.com','Ajay Thakur','staff179'),('user7844','user7844@gmail.com','Rohit Sharma','staff981'),('user9112','user9122@gmail.com','Harshal Patel','staff129'),('user7891','user7891@gmail.com','Ravi Shastri','staff619');
Query OK, 5 rows affected (0.002 sec)
Records: 5 Duplicates: 0 Warnings: 0
```

*Fig 5.4*

### Inserting into table Book

```
MariaDB [peslug20cs479_library_management_system]> insert into Book values ('book8939','Drishyam','Crime',500,'staff179','publ38','user9037'),
('book9891','KGF','Action',1000,'staff169','publ77','user7891'),('book3091','Birbal','Thriller',300,'staff159','publ45','user8192'),('book91
21','Brahmastra','Fantasy',1500,'staff962','publ81','user9112'),('book1239','Aake','Horror',700,'staff981','publ95','user7644');
Query OK, 5 rows affected (0.016 sec)
Records: 5 Duplicates: 0 Warnings: 0
```

*Fig 5.5*

### Inserting into table Publisher

```
MariaDB [peslug20cs479_library_management_system]> insert into Publisher values ('publ38','Hrithik Roshan',2018),('publ28','Thalapathy Vijay',
2020),('publ95','Puneeth Rajkumar',2015),('publ81','Mahesh Babu',2011),('publ30','Ram Charan',2021);
Query OK, 5 rows affected (0.015 sec)
Records: 5 Duplicates: 0 Warnings: 0
```

*Fig 5.6*

### Inserting into table Authentication

```
MariaDB [peslug20cs479_library_management_system]> insert into Authentication values ('login9093','password8'),('login5588','password5'),
('login2321','password3'),('login3873','password7'),('login5767','password3');
Query OK, 5 rows affected (0.015 sec)
Records: 5 Duplicates: 0 Warnings: 0
```

*Fig 5.7*

### Inserting into table Readerphone

```
MariaDB [peslug20cs479_library_management_system]> insert into Readerphone values ('user4341',4798989401),('user7844',8387811401),
('user8563',8989384934),('user9112',8032562250),('user1005',5999092026);
Query OK, 5 rows affected (0.004 sec)
Records: 5 Duplicates: 0 Warnings: 0
```

*Fig 5.8*

### Start checking for foreign key constraints

```
MariaDB [peslug20cs479_library_management_system]> set foreign_key_checks = 1;
Query OK, 0 rows affected (0.000 sec)
```

*Fig 5.9*

## Join Queries

Return staffid and staffname of Staffs generating Reports

```
MariaDB [peslug20cs479_library_management_system]> select s.staffid,s.staffname from Staff as s inner join Report as r where s.staffid = r.staffid;
+-----+-----+
| staffid | staffname |
+-----+-----+
| staff159 | Ram      |
| staff179 | Raju     |
| staff896 | Bheeshma |
+-----+-----+
3 rows in set (0.001 sec)
```

Fig 6.1

Return staffid and staffname of Staffs keeping track of Readers

```
MariaDB [peslug20cs479_library_management_system]> select s.staffid,s.staffname from Staff as s inner join Reader as r where s.staffid = r.staffid;
+-----+-----+
| staffid | staffname |
+-----+-----+
| staff159 | Ram      |
| staff179 | Raju     |
+-----+-----+
2 rows in set (0.012 sec)
```

Fig 6.2

Return ISBN and publishername of all Books

```
MariaDB [peslug20cs479_library_management_system]> select b.ISBN,p.publishername from Book as b left outer join Publisher as p on b.publisherid = p.publisherid;
+-----+-----+
| ISBN    | publishername |
+-----+-----+
| book3091 | NULL         |
| book9891 | NULL         |
| book8939 | Hrithik Roshan |
| book9121 | Mahesh Babu   |
| book1239 | Puneeth Rajkumar |
+-----+-----+
5 rows in set (0.000 sec)
```

Fig 6.3

Return loginid and password of all Staffs

```
MariaDB [peslug20cs479_library_management_system]> select s.loginid,a.password from Staff as s left outer join Authentication as a on s.loginid = a.loginid;
+-----+-----+
| loginid | password |
+-----+-----+
| login2321 | password3 |
| login5767 | password3 |
| login8343 | NULL     |
| login9093 | password8 |
| login9981 | NULL     |
+-----+-----+
5 rows in set (0.010 sec)
```

Fig 6.4

## Aggregate Functions

Return minimum price of Book

```
MariaDB [peslug20cs479_library_management_system]> select min(price) as minimum_price_of_book from Book;
+-----+
| minimum_price_of_book |
+-----+
|                300 |
+-----+
1 row in set (0.002 sec)
```

*Fig 7.1*

Return number of phone numbers

```
MariaDB [peslug20cs479_library_management_system]> select count(phoneno) as number_of_phone_numbers from Readerphone;
+-----+
| number_of_phone_numbers |
+-----+
|                5 |
+-----+
1 row in set (0.001 sec)
```

*Fig 7.2*

Return average price of Books

```
MariaDB [peslug20cs479_library_management_system]> select avg(price) as average_price_of_book from Book;
+-----+
| average_price_of_book |
+-----+
|            800.0000 |
+-----+
1 row in set (0.000 sec)
```

*Fig 7.3*

Return sum of prices of books having price greater than average price of Books

```
MariaDB [peslug20cs479_library_management_system]> select sum(price) as sum_of_prices_of_books from Book where price > (select avg(price) from Book);
+-----+
| sum_of_prices_of_books |
+-----+
|                2500 |
+-----+
1 row in set (0.001 sec)
```

*Fig 7.4*

## Set Operations

Return publisherid of all Books and Publishers

```
MariaDB [peslug20cs479_library_management_system]> select publisherid from Book union select publisherid from Publisher;
+-----+
| publisherid |
+-----+
| publ45      |
| publ77      |
| publ38      |
| publ81      |
| publ95      |
| publ28      |
| publ30      |
+-----+
7 rows in set (0.002 sec)
```

*Fig 8.1*

Return staffid of Readers having Staff

```
MariaDB [peslug20cs479_library_management_system]> select staffid from Reader where staffid in (select staffid from Staff);
+-----+
| staffid |
+-----+
| staff159 |
| staff179 |
+-----+
2 rows in set (0.001 sec)
```

*Fig 8.2*

Return loginid of Staffs having Authentication

```
MariaDB [peslug20cs479_library_management_system]> select loginid from Staff where loginid in (select loginid from Authentication);
+-----+
| loginid |
+-----+
| login2321 |
| login5767 |
| login9093 |
+-----+
3 rows in set (0.016 sec)
```

*Fig 8.3*

## Return loginid of Staffs not having Authentication

```
MariaDB [peslug20cs479_library_management_system]> select loginid from Staff where loginid not in (select loginid from Authentication);
+-----+
| loginid |
+-----+
| login8343 |
| login9981 |
+-----+
2 rows in set (0.007 sec)
```

*Fig 8.4*

## Function and Procedure

### Function

Display the final price of book to user after providing discount

- If price of book is less than 500 then provide 5% discount to user
- If price of book is between 500 and 1000 then provide 10% discount to user
- If price of book is more than 1500 then provide 15% discount to user

```
MariaDB [pes1ug20cs479_library_management_system]> delimiter $$
MariaDB [pes1ug20cs479_library_management_system]> create function final_price1(price int)
-> returns int
-> begin
-> declare vv int;
-> if price < 500 then
-> set vv = price - 5/100 * price;
-> elseif price >= 500 and price <= 1000 then
-> set vv = price - 10/100 * price;
-> elseif price > 1000 then
-> set vv = price - 15/100 * price;
-> end if;
-> return vv;
-> end$$
Query OK, 0 rows affected (0.012 sec)
```

Fig 9.1.1

```
MariaDB [pes1ug20cs479_library_management_system]> delimiter ;
MariaDB [pes1ug20cs479_library_management_system]> select ISBN,title,category,final_price1(price) from Book;
+-----+-----+-----+-----+
| ISBN      | title      | category | final_price1(price) |
+-----+-----+-----+-----+
| book1239  | Aake       | Horror   | 630                  |
| book3091  | Birbal     | Thriller | 285                  |
| book8939  | Drishyam   | Crime    | 450                  |
| book9121  | Brahmastra | Fantasy  | 1275                 |
| book9891  | KGF        | Action   | 900                  |
+-----+-----+-----+-----+
5 rows in set (0.005 sec)
```

Fig 9.1.2



## Procedure

Display the final price of book to user after adding 12% tax to it

```
MariaDB [pes1ug20cs479_library_management_system]> delimiter $$
MariaDB [pes1ug20cs479_library_management_system]> create procedure final_price2()
-> begin
-> select ISBN,title,category,price + 12/100 * price as price from Book;
-> end$$
Query OK, 0 rows affected (0.005 sec)
```

*Fig 9.2.1*

```
MariaDB [pes1ug20cs479_library_management_system]> delimiter ;
MariaDB [pes1ug20cs479_library_management_system]> call final_price2();
+-----+-----+-----+-----+
| ISBN   | title   | category | price   |
+-----+-----+-----+-----+
| book1239 | Aake    | Horror   | 784.0000 |
| book3091 | Birbal  | Thriller | 336.0000 |
| book8939 | Drishyam | Crime    | 560.0000 |
| book9121 | Brahmastra | Fantasy | 1680.0000 |
| book9891 | KGF     | Action   | 1120.0000 |
+-----+-----+-----+-----+
5 rows in set (0.001 sec)

Query OK, 0 rows affected (0.011 sec)
```

*Fig 9.2.2*

## Trigger and Cursor

### Trigger

Creating table book\_backup

```
MariaDB [peslug20cs479_library_management_system]> create table book_backup (ISBN varchar(10),title varchar(20),category varchar(10),price int,
staffid varchar(10),publisherid varchar(10),userid varchar(10));
Query OK, 0 rows affected (0.025 sec)
```

*Fig 10.1.1*

When we try to delete some information from Book table, add those information to book\_backup table

```
MariaDB [peslug20cs479_library_management_system]> delimiter $$
MariaDB [peslug20cs479_library_management_system]> create trigger book_backup
-> before delete
-> on Book for each row
-> begin
-> insert into book_backup select * from Book where ISBN = old.ISBN;
-> end$$
Query OK, 0 rows affected (0.010 sec)

MariaDB [peslug20cs479_library_management_system]> delimiter ;
```

*Fig 10.1.2*

Deleting from table Book

Deleted Book information is added to book\_backup table

```
MariaDB [peslug20cs479_library_management_system]> delete from book where ISBN = 'book3091';
Query OK, 1 row affected (0.009 sec)

MariaDB [peslug20cs479_library_management_system]> select * from book_backup;
+-----+-----+-----+-----+-----+-----+-----+
| ISBN   | title | category | price | staffid | publisherid | userid |
+-----+-----+-----+-----+-----+-----+-----+
| book3091 | Birbal | Thriller | 300 | staff159 | publ45      | user8192 |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)
```

*Figure 10.1.3*

## Cursor

### Creating table backup\_book

```
MariaDB [pes1ug20cs479_library_management_system]> create table backup_book (ISBN varchar(10),title varchar(20),category varchar(10),
price int,staffid varchar(10),publisherid varchar(10),userid varchar(10));
Query OK, 0 rows affected (0.025 sec)
```

Fig 10.2.1

### Backup the contents of Book table to backup\_book table

```
MariaDB [pes1ug20cs479_library_management_system]> delimiter $$
MariaDB [pes1ug20cs479_library_management_system]> create procedure backup_of_book()
-> begin
-> declare done int default 0;
-> declare vISBN varchar(10);
-> declare vtitle varchar(20);
-> declare vcategory varchar(10);
-> declare vprice int;
-> declare vstaffid varchar(10);
-> declare vpublisherid varchar(10);
-> declare vuserid varchar(10);
-> declare book_cursor cursor for select * from Book;
-> declare continue handler for not found set done = 1;
-> open book_cursor;
-> label: loop
-> fetch book_cursor into vISBN,vtitle,vcategory,vprice,vstaffid,vpublisherid,vuserid;
-> insert into backup_book values (vISBN,vtitle,vcategory,vprice,vstaffid,vpublisherid,vuserid);
-> if done = 1 then leave label;
-> end if;
-> end loop;
-> close book_cursor;
-> end$$
Query OK, 0 rows affected (0.005 sec)
```

Fig 10.2.2

### Adding all Book information to book\_backup table

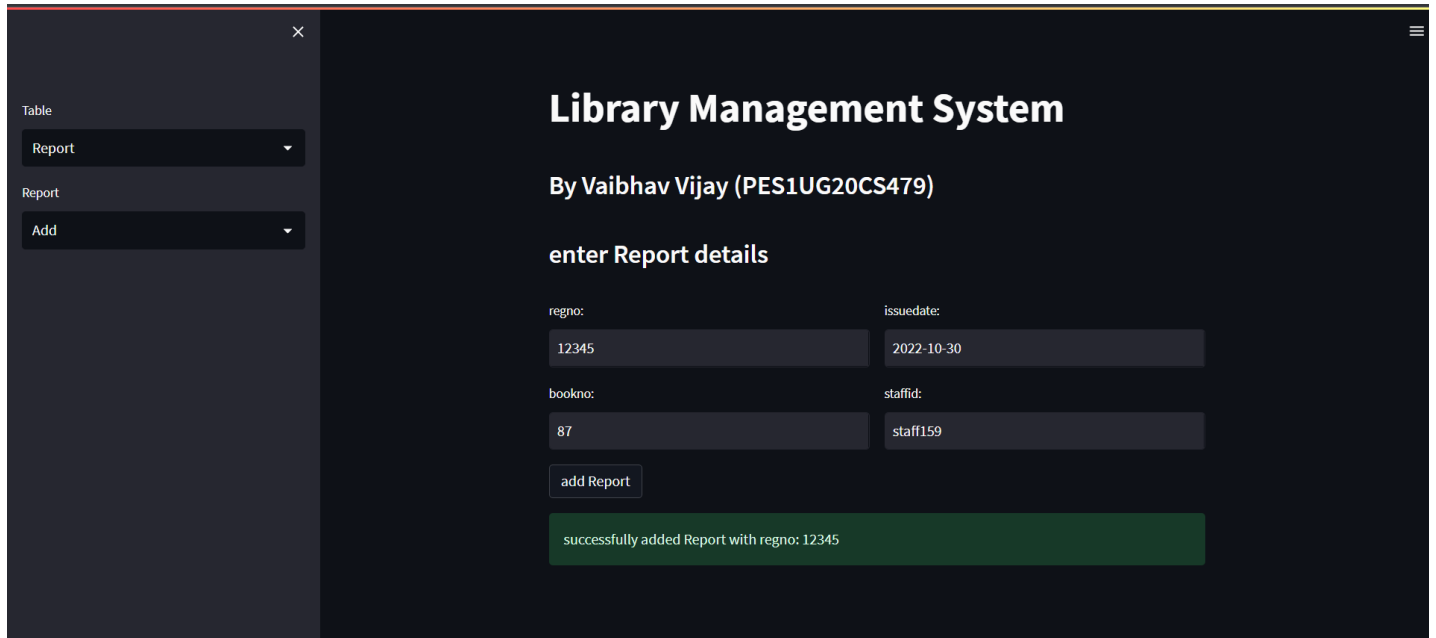
```
MariaDB [pes1ug20cs479_library_management_system]> delimiter ;
MariaDB [pes1ug20cs479_library_management_system]> call backup_of_book;
Query OK, 6 rows affected (0.022 sec)
```

```
MariaDB [pes1ug20cs479_library_management_system]> select * from backup_book;
+-----+-----+-----+-----+-----+-----+-----+
| ISBN | title | category | price | staffid | publisherid | userid |
+-----+-----+-----+-----+-----+-----+-----+
| book1239 | Aake | Horror | 700 | staff981 | publ95 | user7644 |
| book3091 | Birbal | Thriller | 300 | staff159 | publ45 | user8192 |
| book8939 | Drishyam | Crime | 500 | staff179 | publ38 | user9037 |
| book9121 | Brahmastra | Fantasy | 1500 | staff962 | publ81 | user9112 |
| book9891 | KGF | Action | 1000 | staff169 | publ77 | user7891 |
| book9891 | KGF | Action | 1000 | staff169 | publ77 | user7891 |
+-----+-----+-----+-----+-----+-----+-----+
6 rows in set (0.000 sec)
```

Fig 10.2.3

## Simple Frontend that talks to the Backend Database

Inserting into table Report



**Library Management System**

By Vaibhav Vijay (PES1UG20CS479)

enter Report details

regno: 12345 issuedate: 2022-10-30

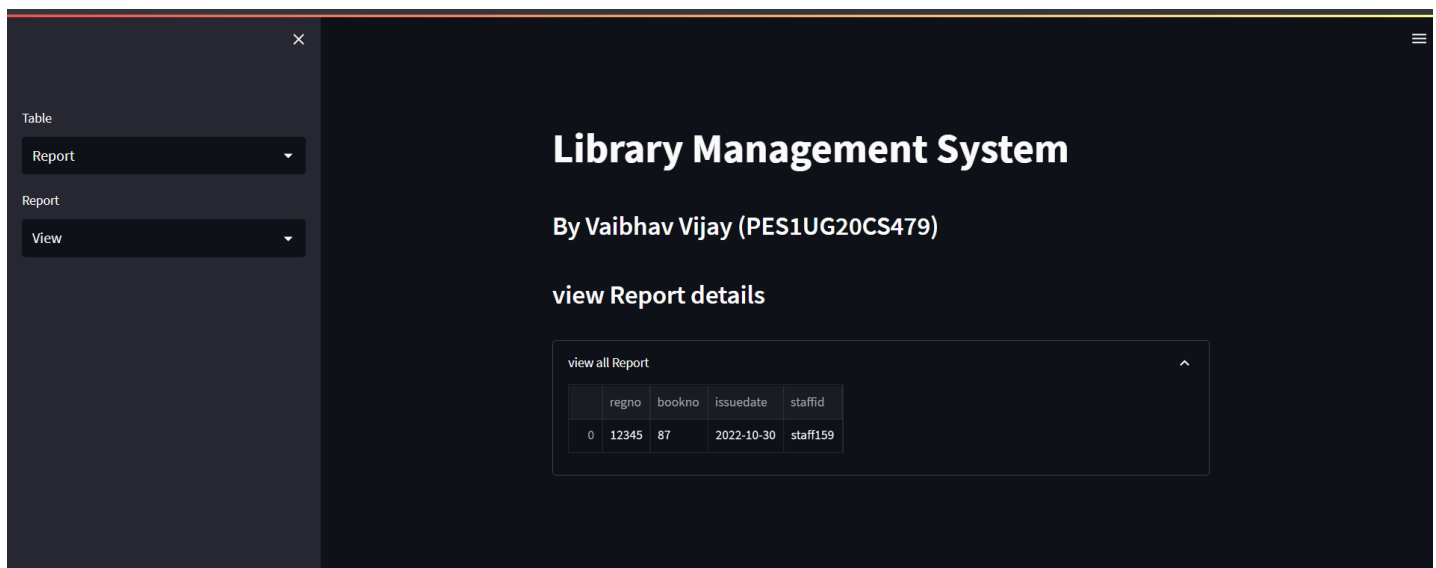
bookno: 87 staffid: staff159

add Report

successfully added Report with regno: 12345

Fig 11.1.1

Viewing table Report



**Library Management System**

By Vaibhav Vijay (PES1UG20CS479)

view Report details

view all Report

	regno	bookno	issuedate	staffid
0	12345	87	2022-10-30	staff159

Fig 11.1.2

## Updating table Report

**Library Management System**

By Vaibhav Vijay (PES1UG20CS479)

**update Report details**

current data

	regno	bookno	issuedate	staffid
0	12345	87	2022-10-30	staff159

select regno to edit

12345

regno: 89895 issuedate: 2022-11-28

bookno: 23 staffid: staff123

update Report data

successfully updated Report with regno: 12345

updated data

	regno	bookno	issuedate	staffid
0	89895	23	2022-11-28	staff123

Fig 11.1.3

## Deleting from table Report

**Library Management System**

By Vaibhav Vijay (PES1UG20CS479)

**delete Report details**

current data

	regno	bookno	issuedate	staffid
0	89895	23	2022-11-28	staff123

select regno to delete

89895

confirm to delete Report with regno: 89895

delete Report

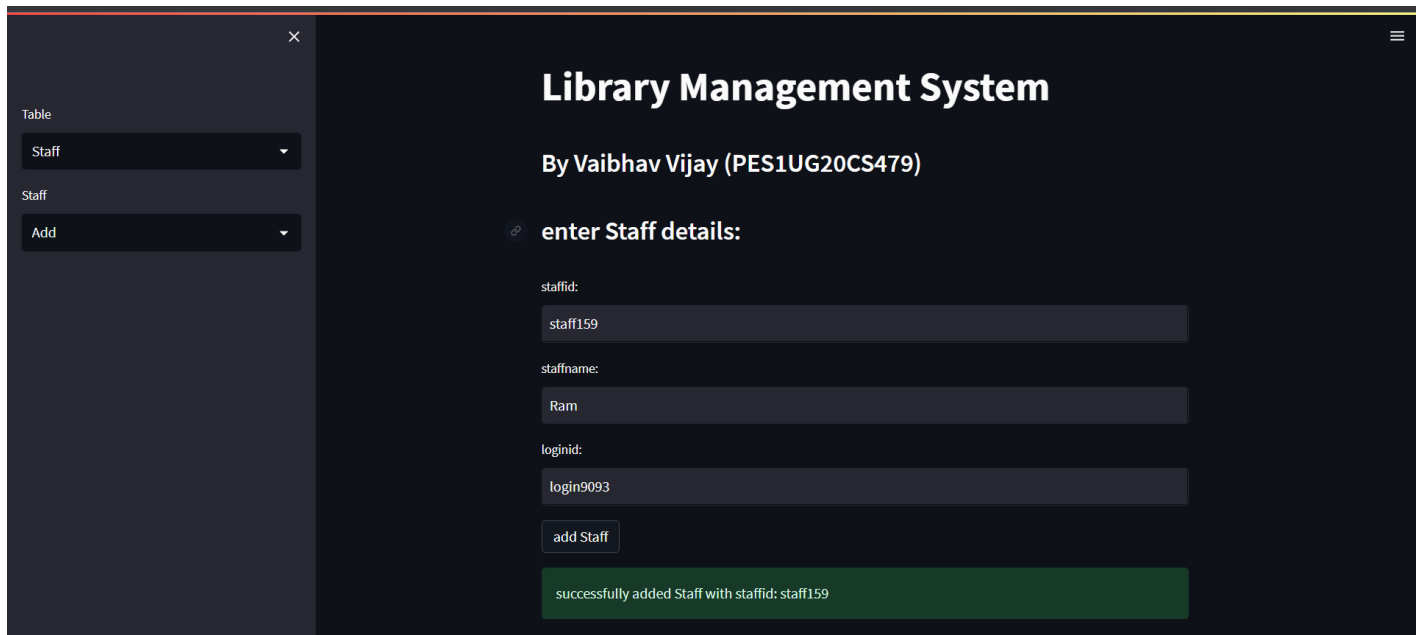
Report has been deleted successfully

updated data

	regno	bookno	issuedate	staffid

Fig 11.1.4

## Inserting into table Staff



The screenshot shows a web application interface for a Library Management System. On the left, there is a sidebar with a 'Table' dropdown menu set to 'Staff' and a 'Staff' dropdown menu set to 'Add'. The main content area has a title 'Library Management System' and a subtitle 'By Vaibhav Vijay (PES1UG20CS479)'. Below this, there is a section titled 'enter Staff details:' with three input fields: 'staffid:' (containing 'staff159'), 'staffname:' (containing 'Ram'), and 'loginid:' (containing 'login9093'). There is an 'add Staff' button. At the bottom, a green message box states 'successfully added Staff with staffid: staff159'.

Library Management System

By Vaibhav Vijay (PES1UG20CS479)

enter Staff details:

staffid:  
staff159

staffname:  
Ram

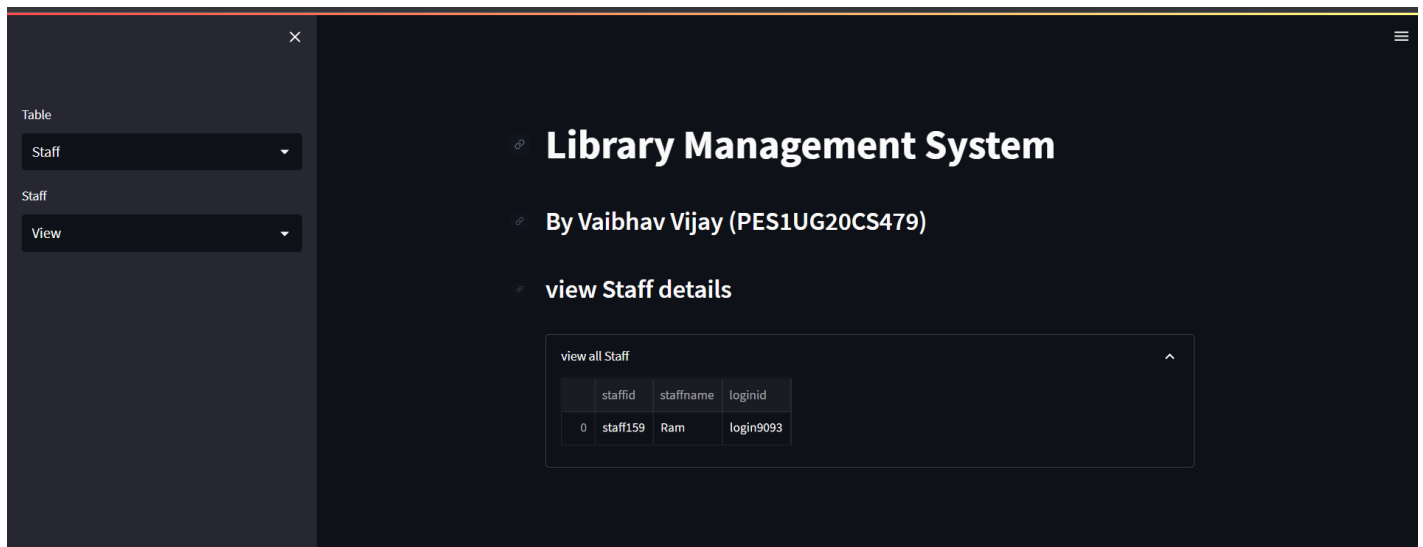
loginid:  
login9093

add Staff

successfully added Staff with staffid: staff159

Fig 11.2.1

## Viewing table Staff



The screenshot shows the same web application interface as Fig 11.2.1, but with the 'Staff' dropdown menu set to 'View'. The main content area has a title 'Library Management System' and a subtitle 'By Vaibhav Vijay (PES1UG20CS479)'. Below this, there is a section titled 'view Staff details' with a 'view all Staff' button. A table displays the staff details.

Library Management System

By Vaibhav Vijay (PES1UG20CS479)

view Staff details

view all Staff

	staffid	staffname	loginid
0	staff159	Ram	login9093

Fig 11.2.2

## Updating table Staff

**Library Management System**

By Vaibhav Vijay (PES1UG20CS479)

update Staff details

current data

	staffid	staffname	loginid
0	staff1159	Ram	login0903

select staffid to edit

staff1159

staffid:

staff1179

staffname:

Raju

loginid:

login8343

update Staff data

successfully updated Staff with staffid: staff1159

updated data

	staffid	staffname	loginid
0	staff1179	Raju	login8343

Fig 11.2.3

## Deleting from table Staff

**Library Management System**

By Vaibhav Vijay (PES1UG20CS479)

delete Staff details

current data

	staffid	staffname	loginid
0	staff1179	Raju	login8343

select staffid to delete

staff1179

confirm to delete Staff with staffid: staff1179

delete Staff

Staff has been deleted successfully

updated data

	staffid	staffname	loginid

Fig 11.2.4

## Inserting into table Book

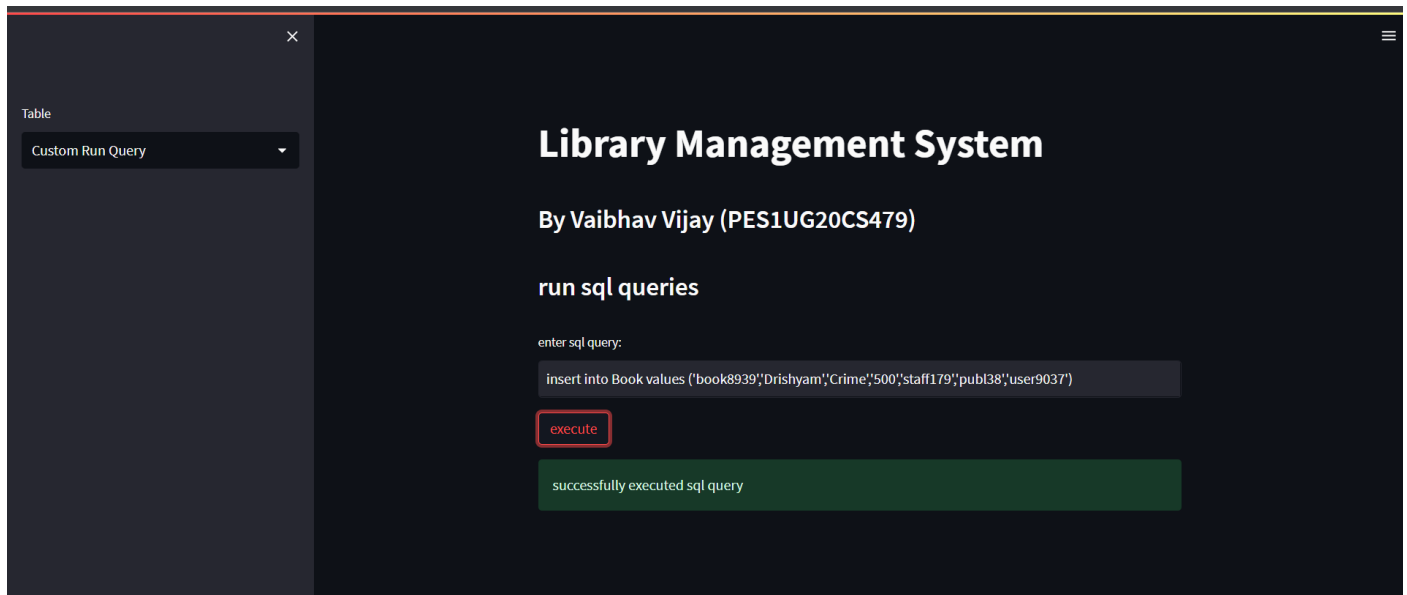


Fig 11.3.1

## Viewing table Book

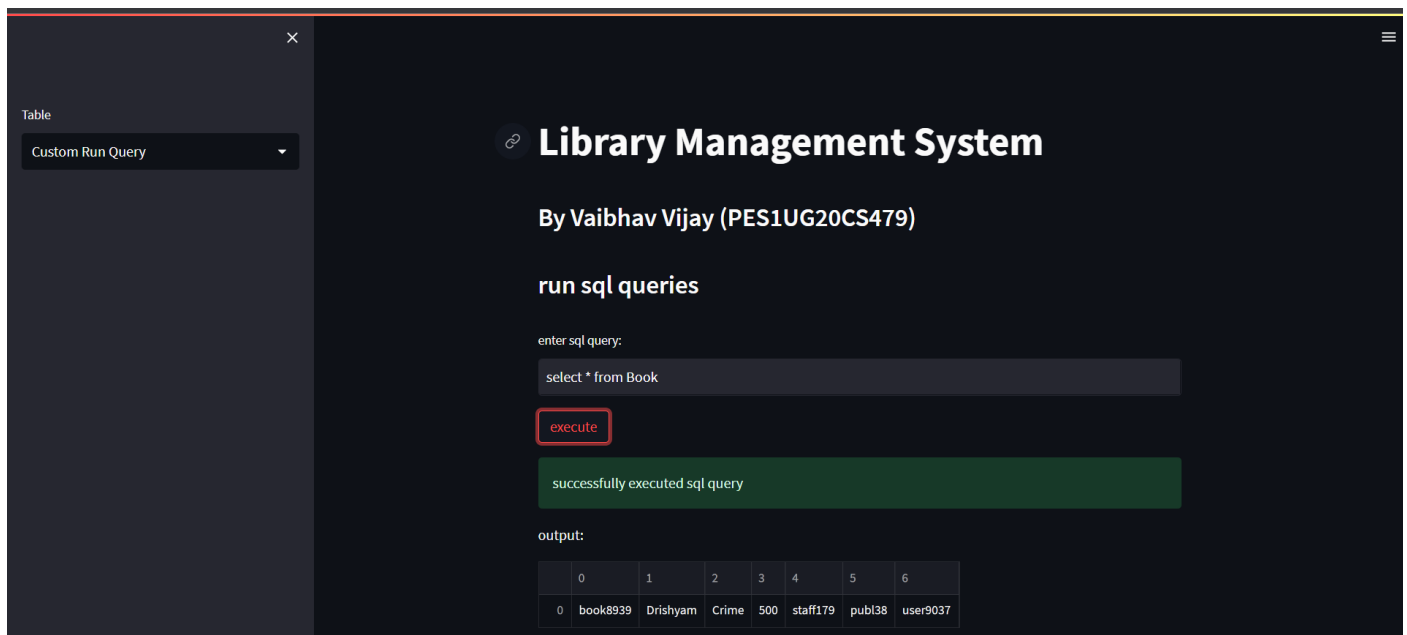


Fig 11.3.2



Updating table Book

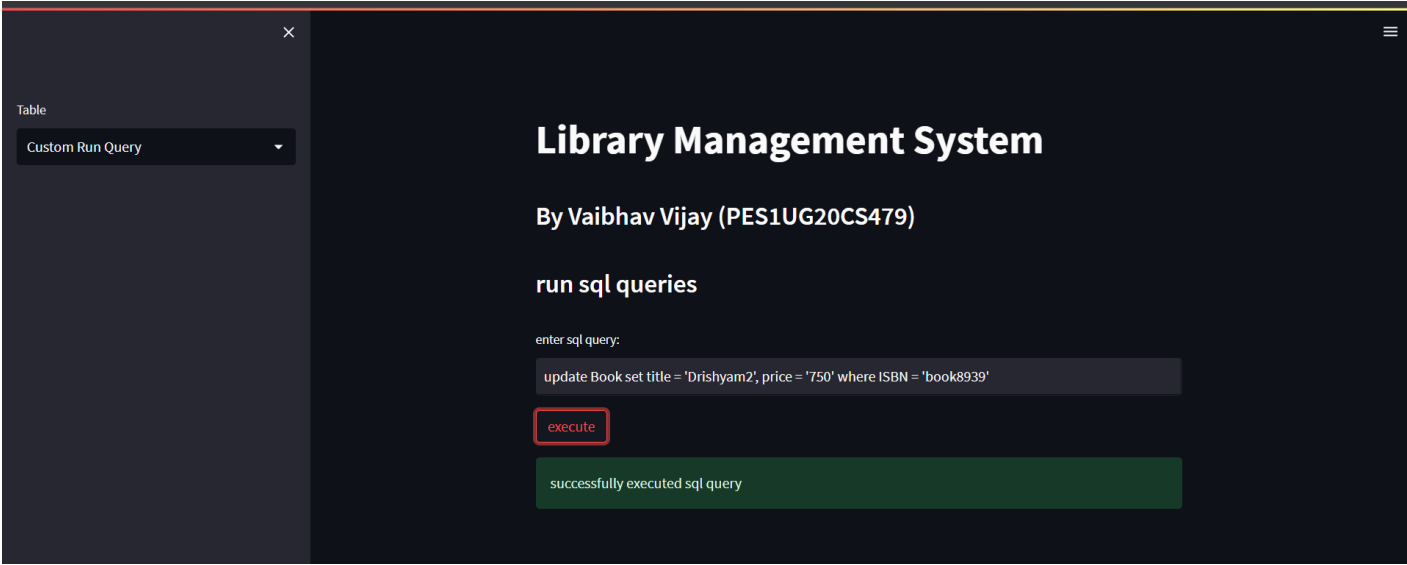


Fig 11.3.3

Viewing updated table Book

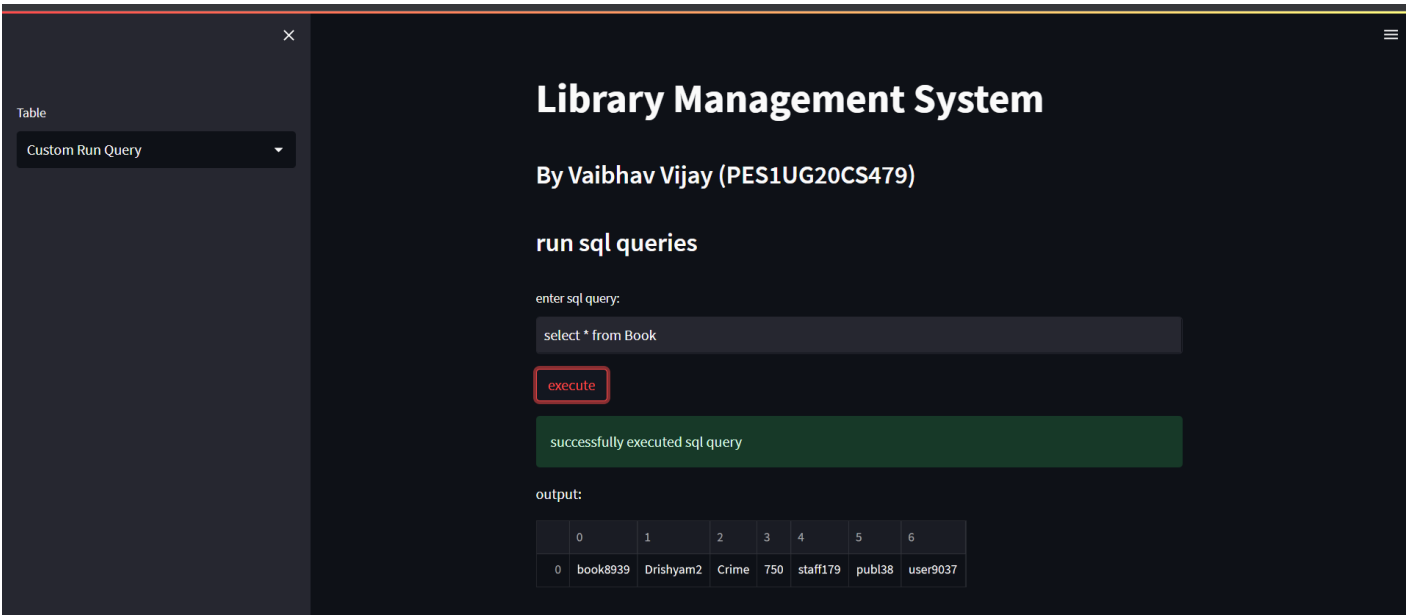


Fig 11.3.4

## Inserting more into table Book

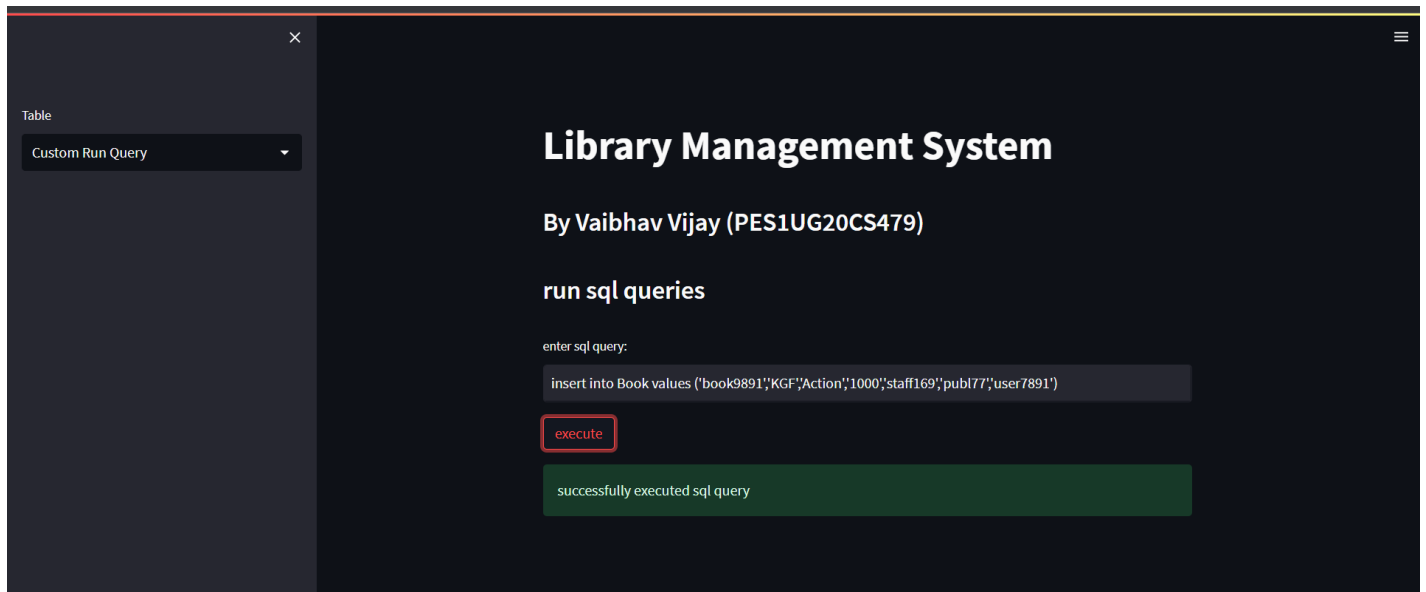


Table  
Custom Run Query

## Library Management System

By Vaibhav Vijay (PES1UG20CS479)

### run sql queries

enter sql query:

```
insert into Book values ('book9891','KGF','Action','1000','staff169','publ77','user7891')
```

execute

successfully executed sql query

Fig 11.3.5

## Deleting from table Book

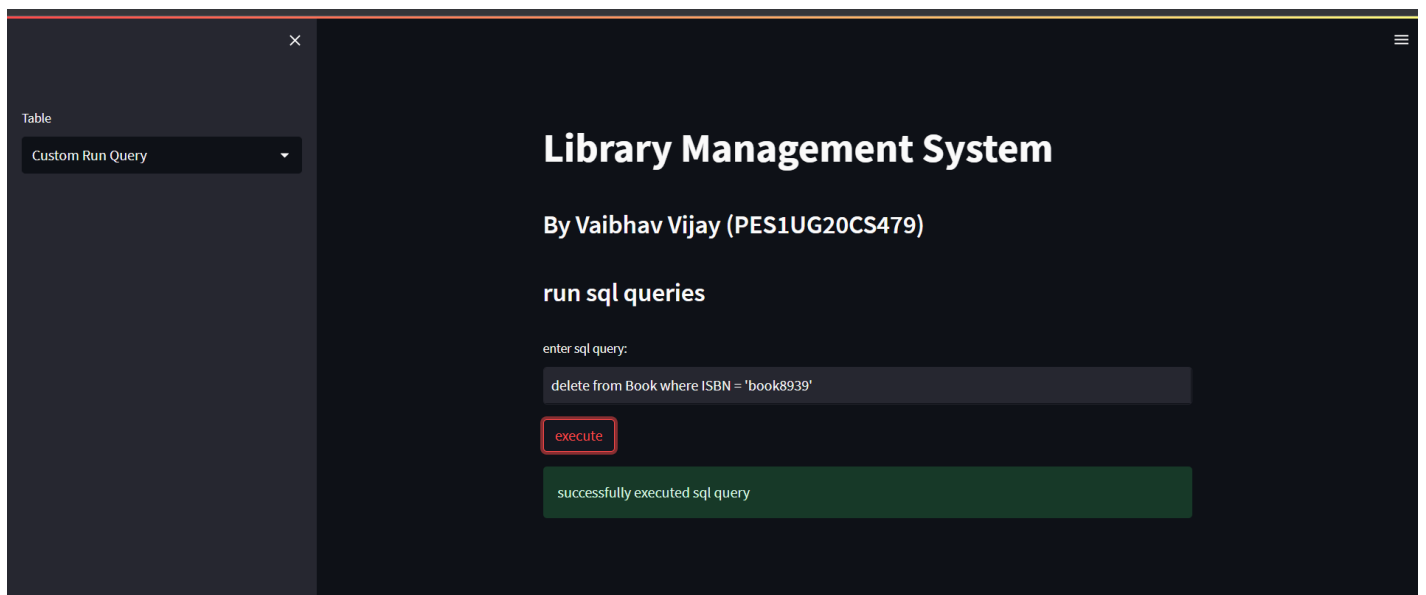


Table  
Custom Run Query

## Library Management System

By Vaibhav Vijay (PES1UG20CS479)

### run sql queries

enter sql query:

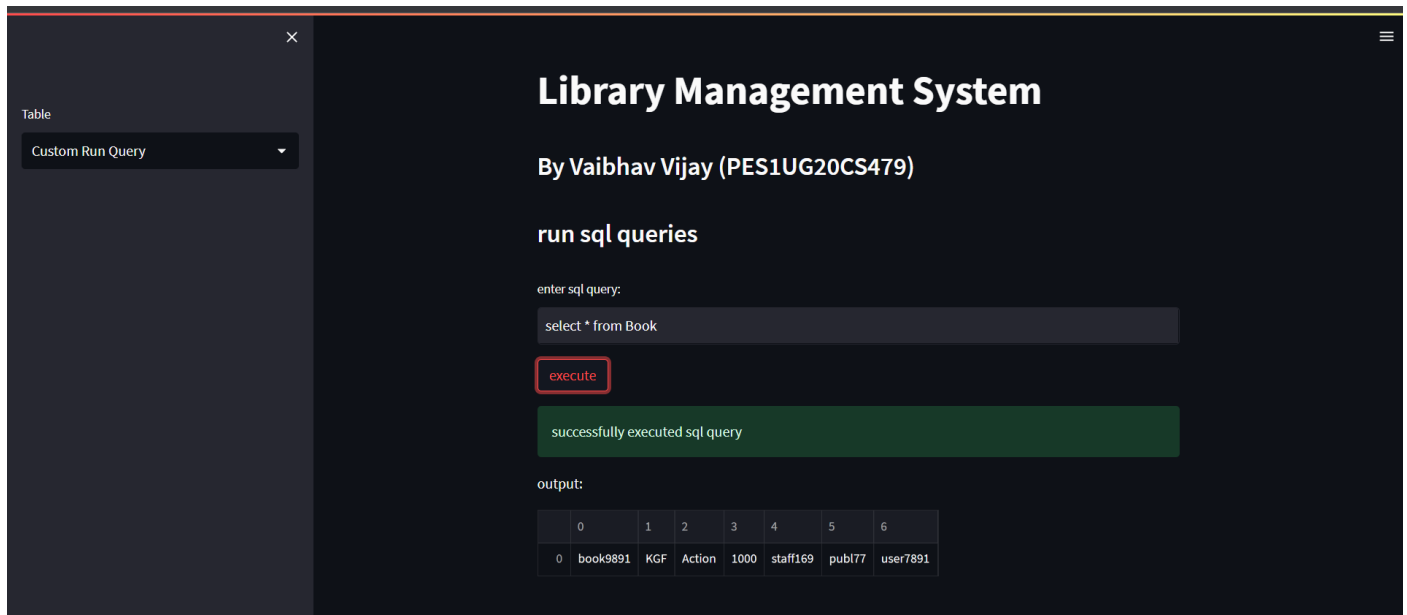
```
delete from Book where ISBN = 'book8939'
```

execute

successfully executed sql query

Fig 11.3.6

## Viewing table Book after deletion



**Library Management System**

By Vaibhav Vijay (PES1UG20CS479)

run sql queries

enter sql query:

select \* from Book

execute

successfully executed sql query

output:

	0	1	2	3	4	5	6
0	book9891	KGF	Action	1000	staff169	publ77	user7891

Fig 11.3.7