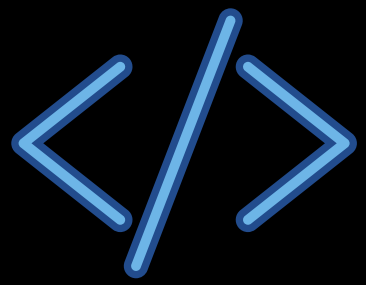

SQL Project

Library Management System

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Database Careation

```
1    -- Library management system
2    -- step 1
3    CREATE DATABASE library;
4    use library;
5
6
```

Table Creation

Table 1- books

Table 2- Mmebers

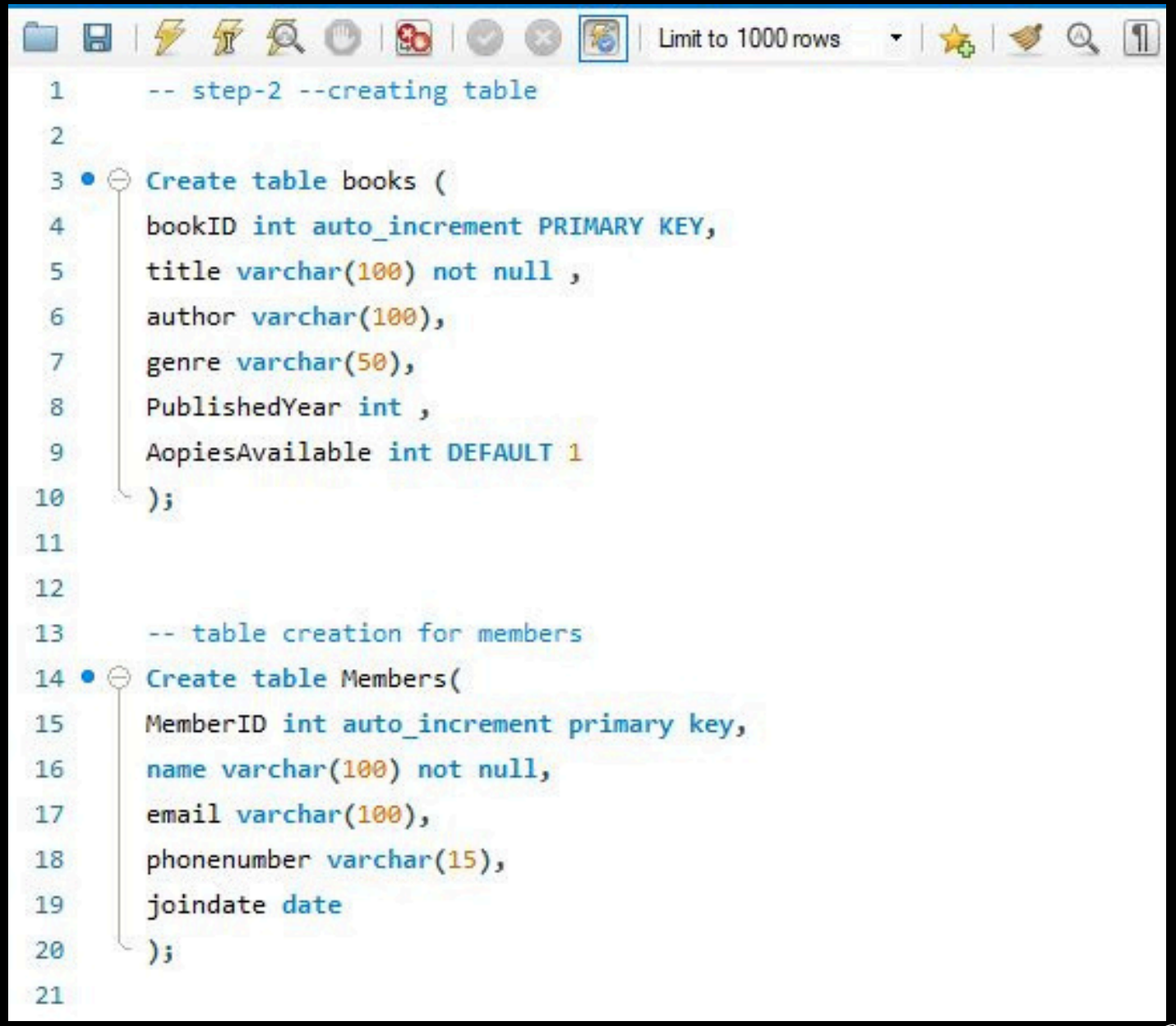

Table Creation

Table 3- Borrow History

```
21
22      -- table creation for borrowhistory
23      create table BorrowHistory (
24      BorrowID INT auto_increment PRIMARY KEY,
25      BookID INT,
26      MemberID INT,
27      BorrowDate date,
28      RetunDate date,
29      foreign key (BookID) references BOOKS(BOOKID),
30      foreign key(MEMBERID) references MEMBERS(MEMBERID)
31      );
32
```

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Data Insertion into tables –

1.)book,
2.)members,
3.)borrow history

SQL File 11* | SQL File 3* | SQL File 4* | SQL File 5* | SQL File 6* | SQL File 7* | SQL File 8*

Limit to 1000 rows

```
1   -- INSERTION OF DATA
2   INSERT INTO books( title , author, genre, publishedyear, copiesavailable)
3   values ('The great mall' , 'scott', 'fiction', 1988, 3),
4   ('horror house' , 'george' , 'fiction', 1949 , 4 ),
5   ('to kill someone' , 'lee', 'classic' , 2001, 6),
6   ('the catcher', 'dharma' , 'fiction', 2010,2);
7
```

Result Grid | Filter Rows: | Edit: | Export/Import:

bookID	title	author	genre	PublishedYear	copiesavailable
1	The great mall	scott	fiction	1988	3
2	horror house	george	fiction	1949	4
3	to kill someone	lee	classic	2001	5
4	the catcher	dharma	fiction	2010	2
NULL	NULL	NULL	NULL	NULL	NULL

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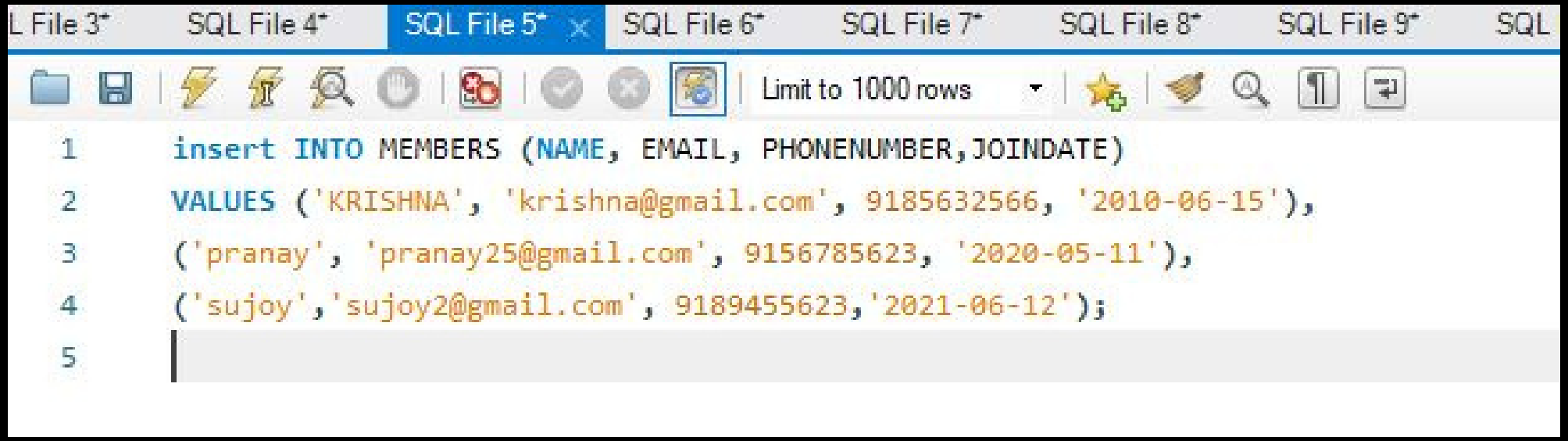
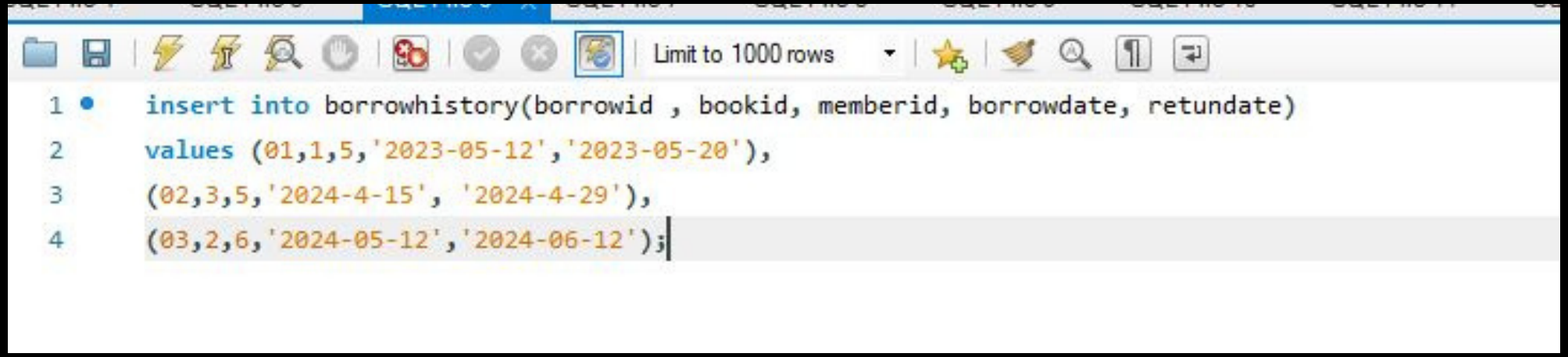
continue....



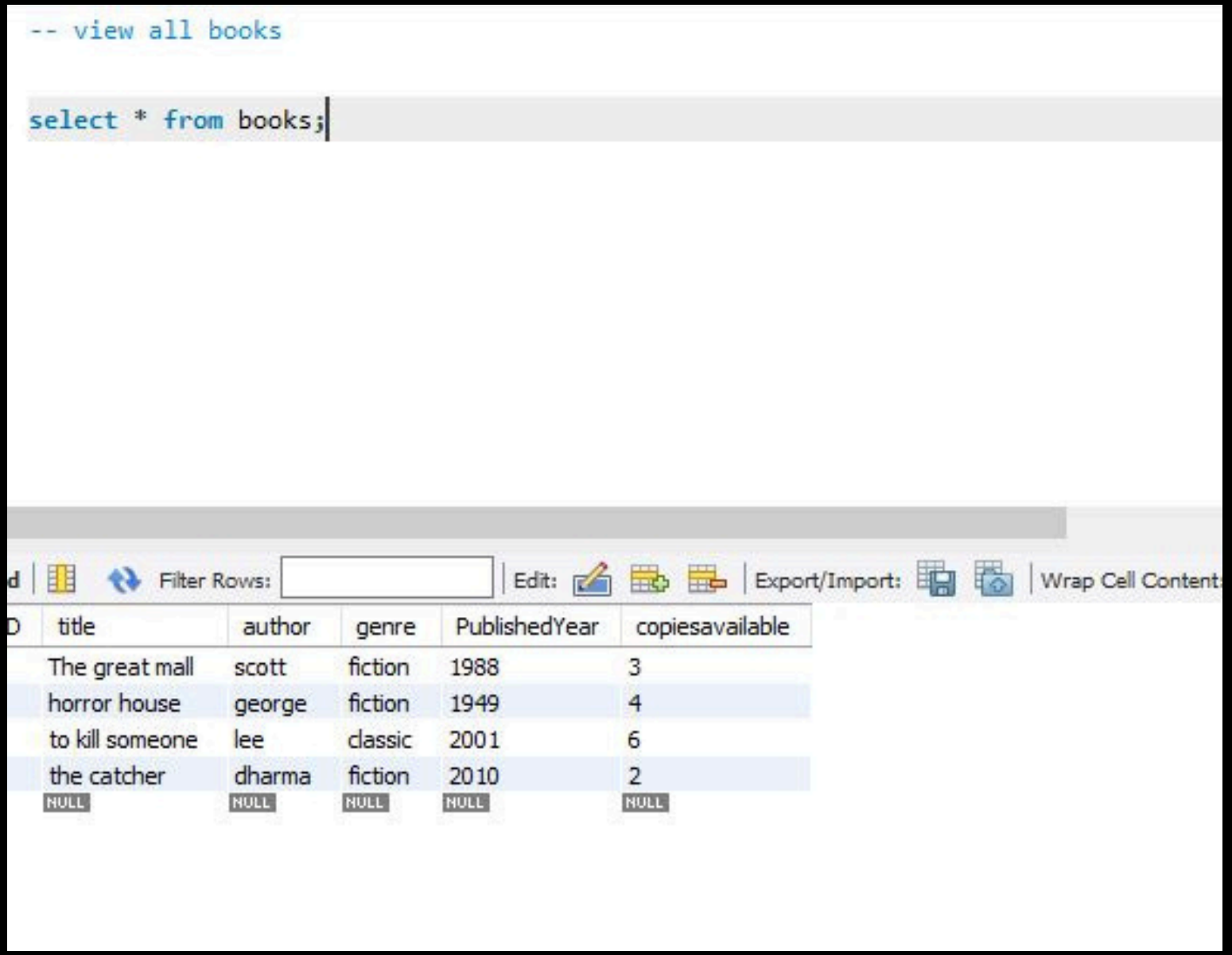


Query-1 view all books

```
-- view all books

select * from books;
```

output



title	author	genre	PublishedYear	copiesavailable
The great mall	scott	fiction	1988	3
horror house	george	fiction	1949	4
to kill someone	lee	classic	2001	6
the catcher	dharma	fiction	2010	2
NULL	NULL	NULL	NULL	NULL

Query-2 Find books by genre

```
1   -- find books by genre
2   select title , author from books where genre='fiction';
```

output

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

title	author
The great mall	scott
horror house	george
the catcher	dharma

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Query-3 Find members who borrowed books

```
1   -- find the members who borrowed books
2   select members.name as membername , books.title as booktitle, borrowhist
3
4   from borrowhistory
5
6   join members on borrowhistory.memberid = members.memberid
7   join books on borrowhistory.BookID= books.bookID;
```

output

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

membername	booktitle	BorrowDate
KRISHNA	The great mall	2023-05-12
KRISHNA	to kill someone	2024-04-15
pranay	horror house	2024-05-12

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Query-4 Check the books with low availability

```
1   -- check the books with low availability
2
3   select title, copiesavailable from books where copiesavailable<3;
```

output

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

title	copiesavailable
the catcher	2

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Query-5 Delete a member

SQL File 5* SQL File 6* SQL File 7* SQL File 8* SQL File 9* SQL File 10* SQ

Limit to 1000 rows

```
1    -- delete a  member
2
3    delete from borrowhistory where MemberID = 5;
4    delete from members where MemberID = 5;
```

output

Result Grid | Filter Rows: | Edit: | Export/Import:

MemberID	name	email	phonenumber	joindate
6	pranay	pranay25@gmail.com	9156785623	2020-05-11
7	sujoy	sujoy2@gmail.com	9189455623	2021-06-12
NULL	NULL	NULL	NULL	NULL

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Query-6 Find overdue books

```sql
-- find overdue books

SELECT
    members.name AS membername,
    books.title AS booktitle,
    borrowhistory.borrowdate
FROM borrowhistory
JOIN members ON borrowhistory.memberid = members.MemberID
JOIN books ON borrowhistory.bookid = books.bookid
WHERE borrowhistory.RetunDate IS NULL
AND borrowhistory.BorrowDate < DATE_SUB(CURDATE(), INTERVAL 7 DAY);
```

output