

SQL Project - Extracting Data using SELECT, WHERE, ORDER BY, LIMIT

Objective:

Extract data from one or more tables using SQL clauses: SELECT, WHERE, ORDER BY, and LIMIT.

Tools & Deliverables:

Tools: DB Browser for SQLite / MySQL Workbench

Deliverables: SQL script using SELECT, WHERE, ORDER BY, LIMIT

Step-by-step SQL Examples:

```
-- 1. SELECT: Get member names and emails
SELECT name, email FROM Members;
```

```
-- 2. WHERE: Get members whose name starts with 'A'
SELECT * FROM Members
WHERE name LIKE 'A%';
```

```
-- 3. ORDER BY: List all books ordered by total copies (highest first)
SELECT title, total_copies FROM Books
ORDER BY total_copies DESC;
```

```
-- 4. LIMIT: Get top 2 most available books
SELECT title, available_copies FROM Books
ORDER BY available_copies DESC
LIMIT 2;
```

```
-- 5. JOIN Example: Members and books they borrowed
SELECT M.name, B.title
FROM Members M
JOIN Borrow BR ON M.member_id = BR.member_id
JOIN Books B ON BR.book_id = B.book_id;
```

Outcome:

You can now extract filtered and meaningful data from one or more tables using SELECT queries combined with WHERE, ORDER BY, and LIMIT.