

Task-7

Objective:

Learn how to:

- Create **views** using the `CREATE VIEW` statement.
 - Use views to simplify complex queries.
 - Apply views for **abstraction**, **security**, and **reusability**.
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Tools:

- ☒ DB Browser for SQLite
 - ☒ MySQL Workbench
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Deliverables:

- SQL scripts with:
 - `CREATE VIEW` statements.
 - Sample queries that use these views.
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Hints / Mini Guide:

1. Create a View with a Complex `SELECT`:

A **view** is a virtual table representing the result of a query.

```
-- Example: Create a view for high-value orders
CREATE VIEW HighValueOrders AS
SELECT order_id, customer_id, total_amount
FROM Orders
WHERE total_amount > 10000;
```

2. Use Views for Abstraction and Security:

- Abstract away complex joins or calculations.
- Allow limited access to sensitive data.

```
-- Secure view with limited employee data
CREATE VIEW PublicEmployees AS
SELECT emp_id, name, department
FROM Employees;
```

3. Querying a View:

Treat it like a table:

```
SELECT * FROM HighValueOrders WHERE customer_id = 3;
```

Outcome

You will be able to:

- Define and use views to reuse SQL logic.
 - Simplify reporting and analytics.
 - Protect data access using controlled views.
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We create views by using MYSQL and HR databases. We attached file in the Repository.