-- 1. Create the Employees table

CREATE TABLE Employees (

EmpID INT PRIMARY KEY,

Name VARCHAR(100),

Department VARCHAR(50),

Salary DECIMAL(10, 2)

);

-- 2. Insert sample employee data

INSERT INTO Employees VALUES

(1, 'Alice', 'HR', 60000.00),

(2, 'Bob', 'IT', 75000.00),

(3, 'Charlie', 'Finance', 80000.00);

-- 3. Create users (with localhost access)

-- Use a secure password in production!

CREATE USER 'admin\_user'@'localhost' IDENTIFIED BY 'AdminPass123!';

CREATE USER 'hr\_user'@'localhost' IDENTIFIED BY 'HRPass123!';

CREATE USER 'developer\_user'@'localhost' IDENTIFIED BY 'DevPass123!';

-- 4. Grant full access to admin\_user

GRANT ALL ON Employees TO 'admin\_user'@'localhost';

-- 5. Grant SELECT on specific columns to hr\_user

GRANT SELECT (EmpID, Name, Department) ON Employees TO 'hr\_user'@'localhost';

-- 6. Grant read-only access to developer\_user

GRANT SELECT ON Employees TO 'developer\_user'@'localhost';

-- 7. REVOKE UPDATE privilege from admin\_user (just as an example)

REVOKE UPDATE ON Employees FROM 'admin\_user'@'localhost';

-- 8. Confirm privileges (optional)

-- SHOW GRANTS FOR 'hr\_user'@'localhost';

-- SHOW GRANTS FOR 'admin\_user'@'localhost';

-- SHOW GRANTS FOR 'developer\_user'@'localhost';

**Notes Before Running:**

* Run this as a **user with full privileges** (like root).
* Make sure the Employees table is in the **current database** (USE your\_db\_name;).
* You can adjust passwords and hostnames as needed.
* These users will only be able to connect **from localhost** unless you change 'localhost'.

**🔍 Testing as a User**

If you're using the MySQL CLI or a client like MySQL Workbench, you can **log in as a user** and test permissions:

--- To become root user

mysql -u hr\_user -p

-- Then try:

SELECT EmpID, Name, Salary FROM Employees; -- Should fail (no access to Salary)

SELECT EmpID, Name FROM Employees; -- Should work