

SQL Employees Assignment

Assignment Question:

Create a company_db database and an employees table with proper constraints. Perform various SQL operations including INSERT, SELECT, UPDATE, DELETE, GROUP BY, HAVING, subqueries, aggregate functions, and sorting queries.

SQL Queries Written:

```
CREATE DATABASE company_db;
USE company_db;

CREATE TABLE employees(
    empid INT PRIMARY KEY,
    emp_name VARCHAR(30) NOT NULL,
    department VARCHAR(30) NOT NULL,
    salary DECIMAL(5,2) NOT NULL CHECK (salary > 0),
    gender ENUM('Male','Female','Other') NOT NULL,
    joining_date DATETIME NOT NULL,
    email VARCHAR(40) NOT NULL UNIQUE
);

ALTER TABLE employees MODIFY COLUMN joining_date DATE;

TRUNCATE TABLE employees;

INSERT INTO employees VALUES
(101,'omkarK','AI&ML',31233,'Male','2026-03-20','omk@gmail.com');

INSERT INTO employees VALUES
(102,'Rushi','AI&ML',314333,'Male','2026-03-20','rushigmail.com'),
(104,'nikhil','AI&ML',31233,'Male','2026-03-20','nikhil@gmail.com');

SELECT * FROM employees;
SHOW WARNINGS;
SELECT emp_name, salary FROM employees;
SELECT * FROM employees WHERE salary > 5000;

ALTER TABLE employees MODIFY COLUMN salary DECIMAL(8,2) NOT NULL CHECK (salary > 0);

UPDATE employees SET salary = 4030532 WHERE empid = 101;

SELECT * FROM employees WHERE department IN ('AI&ML');
SELECT * FROM employees WHERE joining_date < '2027-01-01';
SELECT * FROM employees WHERE salary BETWEEN 3000 AND 9999999;
SELECT * FROM employees WHERE emp_name LIKE 'o%';
SELECT * FROM employees WHERE emp_name LIKE '%i%';

SELECT * FROM employees ORDER BY salary DESC;
SELECT * FROM employees ORDER BY joining_date DESC;
SELECT * FROM employees ORDER BY salary DESC LIMIT 1;

SELECT COUNT(empid) AS total_employees FROM employees;
SELECT * FROM employees WHERE salary = (SELECT MAX(salary) FROM employees);
SELECT AVG(salary) AS average_sal FROM employees;
SELECT SUM(salary) AS total_sal FROM employees;
```

```
SELECT department, COUNT(empid) AS emp_count FROM employees GROUP BY department;
SELECT department, AVG(salary) AS avg_salary FROM employees GROUP BY department;
SELECT department, salary FROM employees GROUP BY department HAVING AVG(salary) > 5000;

SELECT * FROM employees WHERE salary =
(SELECT MAX(salary) FROM employees WHERE salary < (SELECT AVG(salary) FROM employees));

SELECT * FROM employees WHERE salary > (SELECT AVG(salary) FROM employees);

DELETE FROM employees WHERE joining_date < '2015-01-01';
```