

| SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE                           |  | DEPARTMENT OF COMPUTER SCIENCE ENGINEERING |                         |
|--|--|--|-------------------------|
| Program Name: B. Tech  |  | Assignment Type: Lab                       | Academic Year:2025-2026 |
| Course Coordinator Name  |  | Venkataramana Veeramsetty                  |                         |
| Instructor(s) Name   |  | Dr. V. Venkataramana (Co-ordinator)        |                         |
|  |  | Dr. T. Sampath Kumar                       |                         |
|  |  | Dr. Pramoda Patro                          |                         |
|  |  | Dr. Brij Kishor Tiwari                     |                         |
|  |  | Dr.J.Ravichander                           |                         |
|  |  | Dr. Mohammand Ali Shaik                    |                         |
|  |  | Dr. Anirodh Kumar                          |                         |
|  |  | Mr. S.Naresh Kumar                         |                         |
|  |  | Dr. RAJESH VELPULA                         |                         |
|  |  | Mr. Kundhan Kumar                          |                         |
|  |  | Ms. Ch.Rajitha                             |                         |
|  |  | Mr. M Prakash                              |                         |
|  |  | Mr. B.Raju                                 |                         |
|  |  | Intern 1 (Dharma teja)                     |                         |
|  |  | Intern 2 (Sai Prasad)                      |                         |
|  |  | Intern 3 (Sowmya)                          |                         |
|  |  | NS_2 ( Mounika)                            |                         |
| Course Code  | 24CS002PC215   | Course Title                               | AI Assisted Coding      |
| Year/Sem   | II/I   | Regulation                                 | R24                     |
| Date and Day of Assignment   | Week9 - Tuesday  | Time(s)                                    |                         |
| Duration   | 2 Hours  | Applicable to Batches                      |                         |
| AssignmentNumber:16.2(Present assignment number)/24(Total number of assignments) |  |  |                         |
|  |  |  |                         |
| Q.No.  | Question   | Expected Time to complete                  |                         |
| 1  | 1.1.Display all records from the employee's table.<br>2. 2. Display only employee names and their departments.<br>3. 3. Show unique department names.<br>4. 4. Find employees with salary greater than 50000.<br>5. 5. Find employees from the IT department.<br>6. 6. Display employees hired after 2020.<br>7. 7. Show employees in ascending order of salary. | Week9 - Monday                             |                         |

|   |  |
|---|--|
| <p>8. 8. Show top 3 highest-paid employees.</p> <p>9. 9. Count total employees in the company.</p> <p>10. 10. Find the average salary of employees.</p> <p>11. 11. Find the highest and lowest salary.</p> <p>12. 12. Find total salary expenditure per department.</p> <p>13. 13. Display departments having more than one employee.</p> <p>14. 14. Show average salary by department.;</p> <p>15. 15. Count employees hired each year.</p> <p>16. 16. List employees with their department locations.</p> <p>17. 17. Find employees working in Bangalore.</p> <p>18. 18. Display all employees even if they don't belong to a department.</p> <p>19. 19. Find departments with no employees.</p> <p>20. 20. Count employees in each department.</p> <p>21. 21. Find employees earning above average salary.</p> <p>22. 22. Find the department with the highest average salary.</p> <p>23. 23. Find employees hired most recently.</p> <p>24. 24. Find employees earning the second highest salary.</p> <p>25. 25. Find all employees in the same department as 'Amit Sharma'.</p> <p>26. 26. Increase salary by 10% for IT employees.</p> <p>27. 27. Change department of employee 'Ravi' to Marketing.</p> <p>28. 28. Delete employees with salary below 40000.</p> <p>29. 29. Add a new column 'email' to employees.</p> <p>30. 30. Update email IDs for all employees.</p> <p>31. 31. Find top 2 departments by average salary.</p> <p>32. 32. Find how many employees work in each city.</p> <p>33. 33. Show employee count and total salary together.</p> <p>34. 34. Display employees with names starting with 'A'.</p> <p>35. 35. Display employees whose last name ends with 'a'.</p> <p>36. 36. Find employees hired in 2020.</p> <p>37. 37. Show number of days since each employee was hired.</p> <p>38. 38. Display employee names in uppercase.</p> <p>39. 39. Concatenate first and last names.</p> <p>40. 40. Find employees whose salary is between 45000 and 60000.</p> <p>41. 41. Create a view for high salary employees (&gt;55000).</p> <p>42. 42. Display all records from the view.</p> <p>43. 43. Add NOT NULL constraint to department name.</p> <p>44. 44. Drop the view.</p> <p>45. 45. Rename the employees table to staff.</p> <p>46. 46. Create a backup copy of the employees table.</p> <p>47. 47. Delete all data but keep the structure.</p> <p>48. 48. Drop the employees backup table.</p> |  |
|---|--|

|  |   |  |
|--|---|--|
|  | 49. 49. Create an index on employee last name.<br>50. 50. Drop the index. |  |
|--|---|--|

Employee Table

| emp_id | first_name | last_name | department | salary | hire_date  |
|--------|------------|-----------|------------|--------|------------|
| 1      | Amit       | Sharma    | HR         | 45000  | 2020-05-20 |
| 2      | Priya      | Patel     | Finance    | 60000  | 2021-02-10 |
| 3      | Ravi       | Kumar     | IT         | 55000  | 2019-08-14 |
| 4      | Neha       | Reddy     | Marketing  | 48000  | 2022-01-05 |
| 5      | Arjun      | Singh     | IT         | 62000  | 2020-09-12 |

Department Table

| dept_id | dept_name  | location  |
|---------|------------|-----------|
| 1       | HR         | Hyderabad |
| 2       | Finance    | Mumbai    |
| 3       | IT         | Bangalore |
| 4       | Marketing  | Chennai   |
| 5       | Operations | Delhi     |

## 1. Display all records from the employee's table

```
1.sql
▷ Run on active connection | ≡ Select block
-- Drop if exists to allow re-running the script
DROP TABLE IF EXISTS emp;
DROP TABLE IF EXISTS department;

-- Create department table
CREATE TABLE department (
  dep_id INT PRIMARY KEY,
  department VARCHAR(100) NOT NULL,
  location VARCHAR(100)
);

-- Create emp table (department is a foreign key referencing department.dep_id)
CREATE TABLE emp (
  empid INT PRIMARY KEY,
  firstname VARCHAR(50) NOT NULL,
  lastname VARCHAR(50) NOT NULL,
  department INT REFERENCES department(dep_id),
  salary DECIMAL(10,2),
  hire_date DATE
);





-- Sample data for department
INSERT INTO department (dep_id, department, location) VALUES
  (1, 'Engineering', 'New York'),
  (2, 'Sales', 'Chicago'),
  (3, 'HR', 'San Francisco');

-- Sample data for emp
INSERT INTO emp (empid, firstname, lastname, department, salary, hire_date) VALUES
  (101, 'Alice', 'Smith', 1, 85000.00, '2020-06-15'),
  (102, 'Bob', 'Jones', 2, 65000.00, '2019-03-01'),
  (103, 'Carol', 'Lee', 1, 92000.00, '2021-11-12');

-- View both tables
SELECT * FROM department;
SELECT * FROM emp;
```

Output:

| dep_id        | department    | location      |
|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... |
| 1             | Engineering   | New York      |
| 2             | Sales         | Chicago       |
| 3             | HR            | San Francisco |

| empid   | firstname   | lastname  | department  | salary  | hire_date   |
|---|---|---|---|---|---|
|  Filter... |  Filter... |  Filter... |  Filter... |  Filter... |  Filter... |
| 101   | Alice   | Smith   | 1   | 85000   | 2020-06-15T00:0   |
| 102   | Bob   | Jones   | 2   | 65000   | 2019-03-01T00:0   |
| 103   | Carol   | Lee   | 1   | 92000   | 2021-11-12T00:0   |

2. 2. Display only employee names and their departments.
3. 3. Show unique department names.
4. 4. Find employees with salary greater than 50000.
5. 5. Find employees from the IT department.
6. 6. Display employees hired after 2020.
7. 7. Show employees in ascending order of salary.

```

-- 2. Display only employee names and their departments
SELECT e.firstname, e.lastname, d.department
FROM emp e
JOIN department d ON e.department = d.dep_id;

-- 3. Show unique department names
SELECT DISTINCT department FROM department;

-- 4. Find employees with salary greater than 50000
SELECT firstname, lastname, salary
FROM emp
WHERE salary > 50000;

-- 5. Find employees from the IT department
SELECT e.firstname, e.lastname, d.department
FROM emp e
JOIN department d ON e.department = d.dep_id
WHERE d.department = 'IT';

-- 6. Display employees hired after 2020
SELECT firstname, lastname, hire_date
FROM emp
WHERE hire_date > '2020-12-31';

-- 7. Show employees in ascending order of salary
SELECT firstname, lastname, salary
FROM emp
ORDER BY salary ASC;

```

Outputs:

2.

FROM department... SELECT \* FROM emp; -- **Display only**

| firstname     | lastname      | department    |
|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... |
| Alice         | Smith         | Engineering   |
| Carol         | Lee           | Engineering   |
| Bob           | Jones         | Sales         |
| Eva           | Clark         | HR            |
| David         | Brown         | IT            |

3.

| department    |
|---------------|
| abc Filter... |
| Engineering   |
| Sales         |
| HR            |
| IT            |

4.

Display only employee names and salaries -- show unique department

| firstname     | lastname      | salary        |
|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... |
| Alice         | Smith         | 85000         |
| Bob           | Jones         | 65000         |
| Carol         | Lee           | 92000         |
| David         | Brown         | 72000         |

5.

| firstname              | lastname               | department             |
|------------------------|------------------------|------------------------|
| a <b>b</b> c Filter... | a <b>b</b> c Filter... | a <b>b</b> c Filter... |
| David                  | Brown                  | IT                     |

6.

| firstname              | lastname               | hire_date                |
|------------------------|------------------------|--------------------------|
| a <b>b</b> c Filter... | a <b>b</b> c Filter... | a <b>b</b> c Filter...   |
| Carol                  | Lee                    | 2021-11-12T00:00:00.000Z |
| David                  | Brown                  | 2022-02-18T00:00:00.000Z |
| Eva                    | Clark                  | 2023-07-25T00:00:00.000Z |

7.

| firstname              | lastname               | salary                 |
|------------------------|------------------------|------------------------|
| a <b>b</b> c Filter... | a <b>b</b> c Filter... | a <b>b</b> c Filter... |
| Eva                    | Clark                  | 48000                  |
| Bob                    | Jones                  | 65000                  |
| David                  | Brown                  | 72000                  |
| Alice                  | Smith                  | 85000                  |
| Carol                  | Lee                    | 92000                  |

Codes:

```
-- 8. Show top 3 highest-paid employees
SELECT firstname, lastname, salary
FROM emp
ORDER BY salary DESC
LIMIT 3;

-- 9. Count total employees in the company
SELECT COUNT(*) AS total_employees
FROM emp;

-- 10. Find the average salary of employees
SELECT AVG(salary) AS average_salary
FROM emp;

-- 11. Find the highest and lowest salary
SELECT MAX(salary) AS highest_salary, MIN(salary) AS lowest_salary
FROM emp;

-- 12. Find total salary expenditure per department
SELECT d.dep_name AS department, SUM(e.salary) AS total_salary
FROM emp e
JOIN department d ON e.department_id = d.dep_id
GROUP BY d.dep_name;

-- 13. Display departments having more than one employee
SELECT d.dep_name AS department, COUNT(e.empid) AS employee_count
FROM emp e
JOIN department d ON e.department_id = d.dep_id
GROUP BY d.dep_name
HAVING COUNT(e.empid) > 1;
```

```

-- 14. Show average salary by department
SELECT d.dep_name AS department, AVG(e.salary) AS avg_salary
FROM emp e
JOIN department d ON e.department_id = d.dep_id
GROUP BY d.dep_name;

-- 15. Count employees hired each year
SELECT YEAR(hire_date) AS hire_year, COUNT(*) AS total_hired
FROM emp
GROUP BY YEAR(hire_date)
ORDER BY hire_year;

-- 16. List employees with their department locations
SELECT e.firstname, e.lastname, d.dep_name AS department, d.location
FROM emp e
JOIN department d ON e.department_id = d.dep_id;

-- 17. Find employees working in Bangalore
SELECT e.firstname, e.lastname, d.dep_name AS department, d.location
FROM emp e
JOIN department d ON e.department_id = d.dep_id
WHERE d.location = 'Bangalore';

-- 18. Display all employees even if they don't belong to a department
SELECT e.firstname, e.lastname, d.dep_name AS department
FROM emp e
LEFT JOIN department d ON e.department_id = d.dep_id;

-- 19. Find departments with no employees
SELECT d.dep_name AS department
FROM department d
LEFT JOIN emp e ON e.department_id = d.dep_id
WHERE e.empid IS NULL;

```

```
-- 20. Count employees in each department
SELECT d.dep_name AS department, COUNT(e.empid) AS employee_count
FROM department d
LEFT JOIN emp e ON e.department_id = d.dep_id
GROUP BY d.dep_name;

-- 21. Find employees earning above average salary
SELECT firstname, lastname, salary
FROM emp
WHERE salary > (SELECT AVG(salary) FROM emp);

-- 22. Find the department with the highest average salary
SELECT d.dep_name AS department, AVG(e.salary) AS avg_salary
FROM emp e
JOIN department d ON e.department_id = d.dep_id
GROUP BY d.dep_name
ORDER BY avg_salary DESC
LIMIT 1;

-- 23. Find employees hired most recently
SELECT firstname, lastname, hire_date
FROM emp
ORDER BY hire_date DESC
LIMIT 1;

-- 24. Find employees earning the second highest salary (robust method)
SELECT firstname, lastname, salary
FROM emp
WHERE salary = (
    SELECT MAX(salary) FROM emp WHERE salary < (SELECT MAX(salary) FROM emp)
);
```

```

-- 25. Find all employees in the same department as 'Amit Sharma'
SELECT e2.firstname, e2.lastname
FROM emp e2
WHERE e2.department_id = (
    SELECT e1.department_id
    FROM emp e1
    WHERE e1.firstname = 'Amit' AND e1.lastname = 'Sharma'
);

-- 26. Increase salary by 10% for IT employees
UPDATE emp e
JOIN department d ON e.department_id = d.dep_id
SET e.salary = e.salary * 1.10
WHERE d.dep_name = 'IT';

-- 27. Change department of employee 'Ravi' to Marketing
UPDATE emp e
JOIN department d ON d.dep_name = 'Marketing'
SET e.department_id = d.dep_id
WHERE e.firstname = 'Ravi';

```

Outputs:

8.

| firstname     | lastname      | salary        |
|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... |
| Carol         | Lee           | 92000         |
| Alice         | Smith         | 85000         |
| Amit          | Sharma        | 76000         |

9.

| total_employees |
|-----------------|
| abc Filter...   |
| 7               |

10.

| average_salary |
|----------------|
| abc Filter...  |
| 70428.571429   |

11.

| highest_salary | lowest_salary |
|----------------|---------------|
| abc Filter...  | abc Filter... |
| 92000          | 48000         |

12.

| department    | total_salary  |
|---------------|---------------|
| abc Filter... | abc Filter... |
| Engineering   | 177000        |
| Sales         | 120000        |
| HR            | 48000         |
| IT            | 148000        |

13.

| < -- 12. Find total salary expenditure per de... --> |                |
|--|----------------|
| department   | employee_count |
| abc Filter...  | abc Filter...  |
| Engineering  | 2              |
| Sales  | 2              |
| IT   | 2              |

14.

| department    | avg_salary    |
|---------------|---------------|
| abc Filter... | abc Filter... |
| Engineering   | 88500         |
| Sales         | 60000         |
| HR            | 48000         |
| IT            | 74000         |

15.

| < -- 14. Show average salary by department... |               | -- 15. |
|---|---------------|--------|
| hire_year                                     | total_hired   |        |
| abc Filter...                                 | abc Filter... |        |
| 2019  | 1             |        |
| 2020  | 1             |        |
| 2021  | 2             |        |
| 2022  | 1             |        |
| 2023  | 2             |        |

16.

| firstname     | lastname      | department    | location      |
|---------------|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... | abc Filter... |
| Alice         | Smith         | Engineering   | New York      |
| Carol         | Lee           | Engineering   | New York      |
| Bob           | Jones         | Sales         | Chicago       |
| Ravi          | Kumar         | Sales         | Chicago       |
| Eva           | Clark         | HR            | San Francisco |
| David         | Brown         | IT            | Los Angeles   |
| Amit          | Sharma        | IT            | Los Angeles   |

17.

| firstname     | lastname      | department    | location      |
|---------------|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... | abc Filter... |
| No data       |               |               |               |

18.

| firstname     | lastname      | department    |
|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... |
| Alice         | Smith         | Engineering   |
| Bob           | Jones         | Sales         |
| Carol         | Lee           | Engineering   |
| David         | Brown         | IT            |
| Eva           | Clark         | HR            |
| Ravi          | Kumar         | Sales         |
| Amit          | Sharma        | IT            |

19.

< -- 18. Display all employees even if they d...

| department    |
|---------------|
| abc Filter... |
| Marketing     |

20.

< no employee... -- 20. Count employees in each departme..

| department    | employee_count |
|---------------|----------------|
| abc Filter... | abc Filter...  |
| Engineering   | 2              |
| Sales         | 2              |
| HR            | 1              |
| IT            | 2              |
| Marketing     | 0              |

21.

| -- 20. Count employees in each department... |               | -- 21. Find employee |
|--|---------------|----------------------|
| firstname                                    | lastname      | salary               |
| abc Filter...                                | abc Filter... | abc Filter...        |
| Alice  | Smith         | 85000                |
| Carol  | Lee           | 92000                |
| David  | Brown         | 72000                |
| Amit   | Sharma        | 76000                |

22.

| department    | avg_salary    |
|---------------|---------------|
| abc Filter... | abc Filter... |
| Engineering   | 88500         |

23.

| -- 22. Find the department with the highe... |               | -- 23. Find employees hired mos |
|--|---------------|---------------------------------|
| firstname                                    | lastname      | hire_date                       |
| abc Filter...                                | abc Filter... | abc Filter...                   |
| Eva  | Clark         | 2023-07-25T00:00:00.000Z        |

24.

| firstname     | lastname      | salary        |
|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... |
| Alice         | Smith         | 85000         |

25.

| firstname     | lastname      |
|---------------|---------------|
| abc Filter... | abc Filter... |
| David         | Brown         |
| Amit          | Sharma        |

27.

| empid         | firstname     | lastname      | department_id |
|---------------|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... | abc Filter... |
| 101           | Alice         | Smith         | 1             |
| 102           | Bob           | Jones         | 2             |
| 103           | Carol         | Lee           | 1             |
| 104           | David         | Brown         | 4             |
| 105           | Eva           | Clark         | 3             |
| 106           | Ravi          | Kumar         | 5             |
| 107           | Amit          | Sharma        | 4             |

Codes:

```

-- 28. Delete employees with salary below 40000
DELETE FROM emp
WHERE salary < 40000;

-- 29. Add a new column 'email' to employees
ALTER TABLE emp ADD COLUMN email VARCHAR(100);

-- 30. Update email IDs for all employees
UPDATE emp
SET email = CONCAT(LOWER(firstname), '.', LOWER(lastname), '@company.com');

-- 31. Find top 2 departments by average salary
SELECT d.dep_name AS department, AVG(e.salary) AS avg_salary
FROM emp e
JOIN department d ON e.department_id = d.dep_id
GROUP BY d.dep_name
ORDER BY avg_salary DESC
LIMIT 2;

-- 32. Find how many employees work in each city
SELECT d.location AS city, COUNT(e.empid) AS total_employees
FROM department d
LEFT JOIN emp e ON e.department_id = d.dep_id
GROUP BY d.location;

-- 33. Show employee count and total salary together
SELECT d.dep_name AS department, COUNT(e.empid) AS employee_count, SUM(e.salary) AS total_salary
FROM emp e
JOIN department d ON e.department_id = d.dep_id
GROUP BY d.dep_name;

-- 34. Display employees with names starting with 'A'
SELECT firstname, lastname
FROM emp
WHERE firstname LIKE 'A%';

```

```

-- 35. Display employees whose last name ends with 'a'
SELECT firstname, lastname
FROM emp
WHERE lastname LIKE '%a';

-- 36. Find employees hired in 2020
SELECT firstname, lastname, hire_date
FROM emp
WHERE YEAR(hire_date) = 2020;

-- 37. Show number of days since each employee was hired
SELECT firstname, lastname, DATEDIFF(CURDATE(), hire_date) AS days_since_hired
FROM emp;

-- 38. Display employee names in uppercase
SELECT UPPER(firstname) AS firstname_upper, UPPER(lastname) AS lastname_upper
FROM emp;

-- 39. Concatenate first and last names
SELECT CONCAT(firstname, ' ', lastname) AS full_name
FROM emp;

-- 40. Find employees whose salary is between 45000 and 60000
SELECT firstname, lastname, salary
FROM emp
WHERE salary BETWEEN 45000 AND 60000;

-- 41. Create a view for high salary employees (>55000)
CREATE VIEW high_salary_employees AS
SELECT firstname, lastname, salary, department_id
FROM emp
WHERE salary > 55000;

-- 42. Display all records from the view
SELECT * FROM high_salary_employees;

```

```

-- 43. Add NOT NULL constraint to department name
ALTER TABLE department MODIFY dep_name VARCHAR(100) NOT NULL;

-- 44. Drop the view
DROP VIEW IF EXISTS high_salary_employees;

-- 45. Rename the employees table to staff
RENAME TABLE emp TO staff;

-- 46. Create a backup copy of the employees table
CREATE TABLE staff_backup AS
SELECT * FROM staff;

-- 47. Delete all data but keep the structure
DELETE FROM staff;

-- 48. Drop the employees backup table
DROP TABLE IF EXISTS staff_backup;

-- 49. Create an index on employee last name
CREATE INDEX idx_lastname ON staff(lastname);

-- 50. Drop the index
DROP INDEX idx_lastname ON staff;

```

Outputs:

31.

| dep_name                                   | avg_salary                                 |
|--|--|
| <input type="text" value="abc"/> Filter... | <input type="text" value="abc"/> Filter... |
| Engineering                                | 88500                                      |
| IT   | 81400                                      |

32.

| city          | total_employees ↑ |
|---------------|-------------------|
| abc Filter... | abc Filter...     |
| New York      | 1                 |
| Chicago       | 1                 |
| San Francisco | 2                 |
| Los Angeles   | 1                 |
| Bangalore     | 1                 |

33.

| dep_name      | employee_count | total_salary  |
|---------------|----------------|---------------|
| abc Filter... | abc Filter...  | abc Filter... |
| Engineering   | 2              | 177000        |
| Sales         | 1              | 65000         |
| HR            | 1              | 48000         |
| IT            | 2              | 162800        |
| Marketing     | 1              | 55000         |

34.

| firstname      | lastname       |
|----------------|----------------|
| a bc Filter... | a bc Filter... |
| Alice          | Smith          |
| Amit           | Sharma         |

35.

| firstname      | lastname       |
|----------------|----------------|
| a bc Filter... | a bc Filter... |
| Amit           | Sharma         |

36.

| firstname      | lastname       | hire_date                |
|----------------|----------------|--------------------------|
| a bc Filter... | a bc Filter... | a bc Filter...           |
| Alice          | Smith          | 2020-06-15T00:00:00.000Z |

37.

| firstname     | lastname      | days_since_hired |
|---------------|---------------|------------------|
| abc Filter... | abc Filter... | abc Filter...    |
| Alice         | Smith         | 1967             |
| Bob           | Jones         | 2439             |
| Carol         | Lee           | 1452             |
| David         | Brown         | 1354             |
| Eva           | Clark         | 832              |
| Ravi          | Kumar         | 1658             |
| Amit          | Sharma        | 1033             |

38.

| first_upper   | last_upper    |
|---------------|---------------|
| abc Filter... | abc Filter... |
| ALICE         | SMITH         |
| BOB           | JONES         |
| CAROL         | LEE           |
| DAVID         | BROWN         |
| EVA           | CLARK         |
| RAVI          | KUMAR         |
| AMIT          | SHARMA        |

39.

| full_name     |
|---------------|
| abc Filter... |
| Alice Smith   |
| Bob Jones     |
| Carol Lee     |
| David Brown   |
| Eva Clark     |
| Ravi Kumar    |
| Amit Sharma   |

40.

| firstname     | lastname      | salary        |
|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... |
| Eva           | Clark         | 48000         |
| Ravi          | Kumar         | 55000         |

42.

| firstname     | lastname ↑    | salary        | department_id |
|---------------|---------------|---------------|---------------|
| abc Filter... | abc Filter... | abc Filter... | abc Filter... |
| Alice         | Sort lastname | 85000         | 1             |
| Bob           | Jones         | 65000         | 2             |
| Carol         | Lee           | 92000         | 1             |
| David         | Brown         | 79200         | 4             |
| Amit          | Sharma        | 83600         | 4             |

After all queries:

Output:

| < me CREATE I... -- 50. Drop the index DROP INDEX idx_las... -- 51. Rename staff BACK to emp for next ... -- (OPTIONAL) Quick verification SELECT ... |               |               |               |               |               |
|---|---------------|---------------|---------------|---------------|---------------|
| firstname   | lastname      | department_id | salary        | hire_date     | email         |
| abc Filter...   | abc Filter... | abc Filter... | abc Filter... | abc Filter... | abc Filter... |
| No data   |               |               |               |               |               |