-- Q1: Retrieve all employees’ first\_name and their departments.

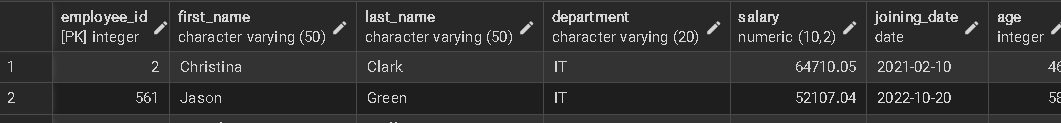
SELECT first\_name,department FROM employee2;

A screenshot of a black screen

Description automatically generated

-- Q2: Update the salary of all employees in the 'IT' department by increasing it by 10%.

UPDATE employee2

SET salary = salary+(salary\*0.1);  
  


-- Q3: Delete all employees who are older than 34 years.

DELETE FROM employee2

WHERE age >34;

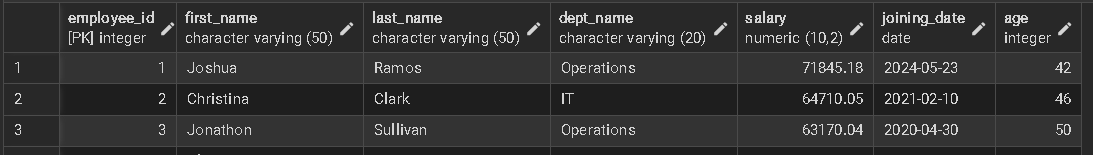
-- Q4: Add a new column `email` to the `employees` table.

ALTER TABLE employee2

ADD COLUMN email VARCHAR(100);  
  
A screenshot of a computer

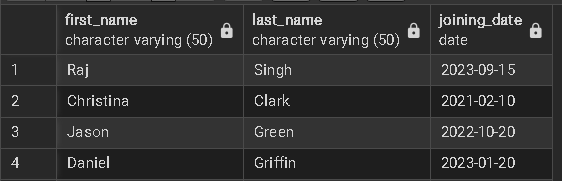
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-- Q5: Rename the `department` column to `dept\_name`.

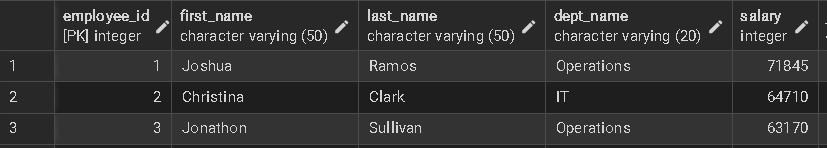
ALTER TABLE employee2; RENAME COLUMN department TO dept\_name;  
  


-- Q6: Retrieve the names of employees who joined after January 1, 2021.

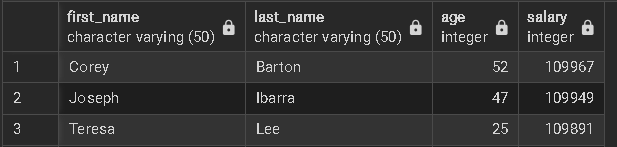
SELECT first\_name ,last\_name ,joining\_date FROM employee2

WHERE joining\_date >'2021,01,01';  
  
  
  
-- Q7: Change the data type of the `salary` column to `INTEGER`.

ALTER TABLE employee2

ALTER COLUMN salary TYPE INTEGER USING salary :: INTEGER;  
  
  
  
-- Q8: List all employees with their age and salary in descending order of salary.

SELECT first\_name,last\_name,age,salary FROM employee2

ORDER BY salary DESC;  
  
  
  
  
-- Q9: Insert a new employee with the following details:

-- (employee\_id,'Raj', 'Singh', 'Marketing', 60000, '2023-09-15', 30)

INSERT INTO employee2(employee\_id, first\_name, last\_name, department, salary, joining\_date, age)

VALUES(1001,'Raj', 'Singh', 'Marketing', 60000, '2023-09-15', 30);  
  
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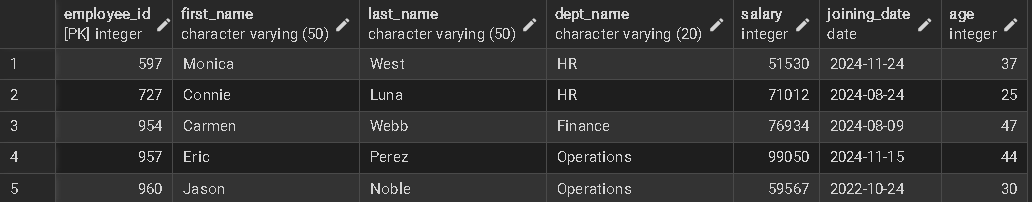
-- Q10: Update age of employee +1 to every employee

UPDATE employee2

SET age = age +1;  
  
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-- Q11: Find all employees who joined after 2022-01-01.

SELECT \* FROM employee2

WHERE joining\_date >'2022-01-01';  
  
  
-- Q12: Find the average salary of employees in each department.

SELECT dept\_name, AVG (salary) AS avgrage\_salary FROM employee2

GROUP BY dept\_name;  
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-- Q13: Find employees who are older than 30 years.

SELECT \* FROM employee2

WHERE age >30;  
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-- Q14: Find the highest salary in the IT department.

SELECT MAX (salary) AS highest\_salary FROM employee2

WHERE dept\_name = 'IT';  
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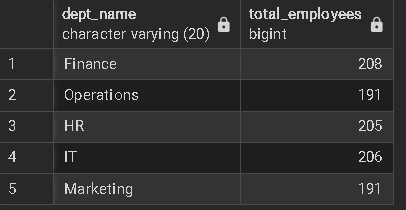
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-- Q15: Update the email column for all employees with appropriate values.

UPDATE employee2

SET email = LOWER(CONCAT(first\_name,'.',last\_name,'@example.com'));  
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-- Q16: Find the total number of employees in each department.

SELECT dept\_name,COUNT(\*) AS total\_employees FROM employee2

GROUP BY dept\_name;  
  
-- Q17: Sort employees by their joining\_date from the newest to the oldest.

SELECT \* FROM employee2

ORDER BY joining\_date DESC;  
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-- Q18: Retrieve employees whose salary is between 50,000 and 70,000.

SELECT salary FROM employee2

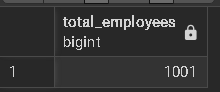
WHERE salary BETWEEN 50000 AND 70000;  
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-- Q19: Find employees who have 'a' in their first name.

SELECT \* FROM employee2

WHERE first\_name LIKE '%a%';  
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-- Q20: Count the total number of employees in the table.

SELECT COUNT (\*) AS total\_employees FROM employee2;  
  
-- Q21: Retrieve employees grouped by their department, sorted by department name.

SELECT dept\_name,COUNT(\*) AS total\_employees FROM employee2

GROUP BY dept\_name

ORDER BY dept\_name;  
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-- Q22: Find employees who joined in the year 2023.

SELECT \* FROM employee2

WHERE EXTRACT(YEAR FROM joining\_date)= 2023;

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-- Q23: Delete all employees who belong to the 'HR' department.

DELETE FROM employee2

WHERE dept\_name = 'HR';

-- Q24: Retrieve the minimum salary in the company.

SELECT MIN(salary) AS minimum\_salary FROM employee2;  
  
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Description automatically generated

-- Q25: Retrieve employees whose age is NULL.

SELECT \* FROM employee2

WHERE salary IS NUll;  
