**Name: Debjyoti Sarkar Sumonta**

**Student ID: 22341019**

**CSE370 Section 2**

CREATE TABLE Employee (

employee\_id CHAR(10),

first\_name VARCHAR(20),

last\_name VARCHAR(20),

email VARCHAR(60),

phone\_number CHAR(14),

hire\_date DATE,

job\_id CHAR(10),

salary INT,

commission\_pct DECIMAL(5,3),

manager\_id CHAR(10),

department\_id CHAR(10),

PRIMARY KEY (employee\_id, job\_id, manager\_id, department\_id)

);

INSERT INTO Employee(employee\_id,first\_name,last\_name,email,phone\_number,hire\_date,job\_id,salary,commission\_pct,manager\_id,department\_id) VALUES

('EMP001', 'John', 'Doe', 'john.doe@email.com', '+1234567890', '2022-01-15', 'JOB001', 50000, 0.05, 'MNG001', 'DPT001'),

('EMP002', 'Jane', 'Smith', 'jane.smith@email.com', '+9876543210', '2022-02-20', 'JOB002', 60000, 0.08, 'MNG002', 'DPT002'),

('EMP003', 'Robert', 'Johnson', 'robert.johnson@email.com', '+3456789012', '2022-03-10', 'JOB003', 55000, 0.03, 'MNG001', 'DPT003'),

('EMP004', 'Maria', 'Rodriguez', 'maria.rodriguez@email.com', '+6543210987', '2022-04-05', 'JOB002', 62000, 0.07, 'MNG003', 'DPT001'),

('EMP005', 'Michael', 'Brown', 'michael.brown@email.com', '+2345678901', '2022-05-12', 'JOB001', 53000, 0.02, 'MNG002', 'DPT004'),

('EMP006', 'Emily', 'Davis', 'emily.davis@email.com', '+8765432109', '2022-06-18', 'JOB004', 58000, 0.06, 'MNG003', 'DPT002'),

('EMP007', 'Christopher', 'Lee', 'christopher.lee@email.com', '+4567890123', '2022-07-25', 'JOB003', 59000, 0.04, 'MNG001', 'DPT005'),

('EMP008', 'Olivia', 'White', 'olivia.white@email.com', '+7890123456', '2022-08-30', 'JOB002', 61000, 0.09, 'MNG002', 'DPT006'),

('EMP009', 'Daniel', 'Kim', 'daniel.kim@email.com', '+3210987654', '2022-09-05', 'JOB001', 54000, 0.01, 'MNG003', 'DPT007'),

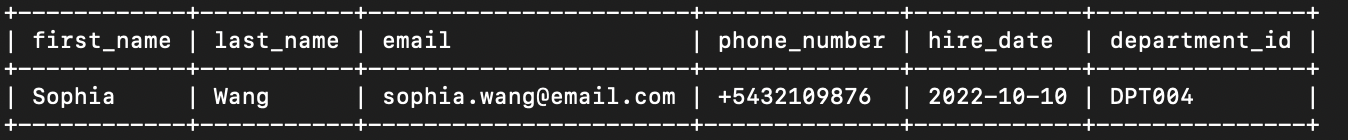
('EMP010', 'Sophia', 'Wang', 'sophia.wang@email.com', '+5432109876', '2022-10-10', 'JOB004', 57000, 0.05, 'MNG001', 'DPT004');

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**TASK 1:**

SELECT first\_name, last\_name, email, phone\_number, hire\_date, department\_id

FROM Employee WHERE hire\_date = (SELECT MAX(hire\_date) FROM Employee);

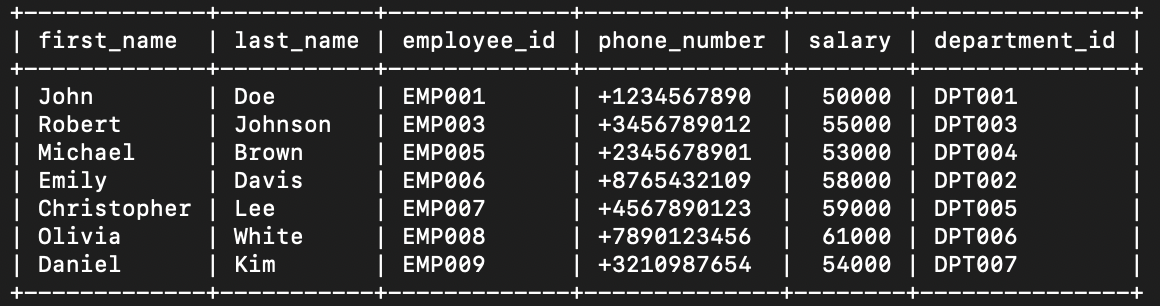


**TASK 2:**

SELECT first\_name, last\_name, employee\_id, phone\_number, salary, department\_id

FROM Employee WHERE (department\_id, salary) IN

(SELECT department\_id, MIN(salary) FROM Employee GROUP BY department\_id);



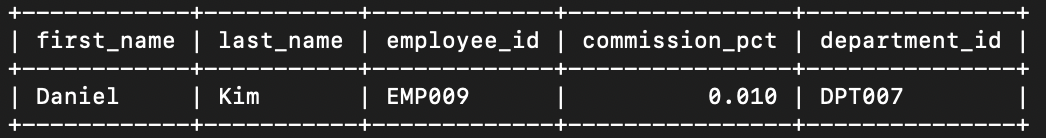
**TASK 3:**

SELECT first\_name, last\_name, employee\_id, commission\_pct, department\_id

FROM Employee

WHERE department\_id = 'DPT007'

AND commission\_pct < (SELECT MIN(commission\_pct) FROM Employee WHERE department\_id = 'DPT005');



**TASK 4:**

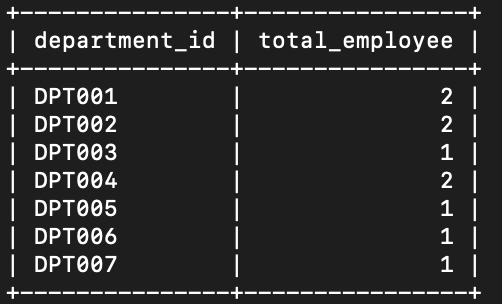
SELECT department\_id, COUNT(\*) as total\_employee

FROM Employee

WHERE department\_id NOT IN

(SELECT department\_id FROM Employee WHERE salary < 30000)

GROUP BY department\_id;



**TASK 5:**

SELECT department\_id, job\_id, commission\_pct

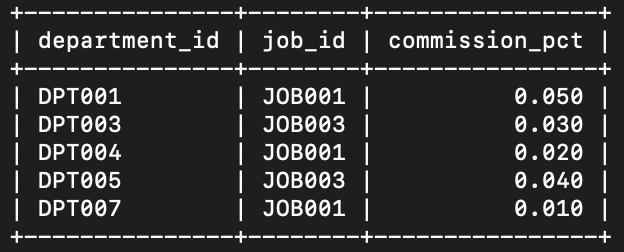
FROM Employee e1 WHERE job\_id NOT IN

(SELECT job\_id FROM Employee e2

WHERE commission\_pct >

(SELECT MIN(commission\_pct) FROM Employee e3 WHERE e3.department\_id = e2.department\_id))

GROUP BY department\_id, job\_id, commission\_pct;

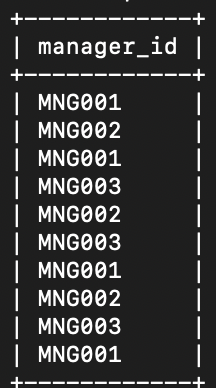


**TASK 6:**

SELECT manager\_id FROM Employee WHERE manager\_id not in (

SELECT manager\_id FROM Employee WHERE salary < 3500

);



**TASK 7:**

SELECT first\_name, last\_name, employee\_id, email, salary, department\_id, commission\_pct

FROM Employee WHERE (manager\_id, commission\_pct) IN

(SELECT manager\_id, MIN(commission\_pct) FROM Employee GROUP BY manager\_id);

