To answer this question, I created the tables using the provided data. The two queries are located at the bottom of the file.

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CREATE TABLE jobs (
    job id int PRIMARY KEY,
    job title VARCHAR (35) NOT NULL,
   min salary decimal,
   max salary decimal
);
CREATE TABLE departments (
   department id int PRIMARY KEY,
    department name VARCHAR(35) NOT NULL,
   location id int
);
CREATE TABLE employees (
    employee id int PRIMARY KEY,
   first name VARCHAR(20),
   last name VARCHAR(25) NOT NULL,
   email VARCHAR(25) NOT NULL,
   phone number VARCHAR(20),
   hire date DATE NOT NULL,
    job id int NOT NULL,
    salary decimal NOT NULL,
   manager id int,
   department id int,
   FOREIGN KEY (job id) REFERENCES jobs (job id),
   FOREIGN KEY (department id) REFERENCES departments (department id)
);
INSERT INTO jobs(job id, job title, min salary, max salary) VALUES (1,
"Administration Assistant", 1500, 2000);
INSERT INTO jobs (job id, job title, min salary, max salary) VALUES (2,
"Marketing Manager", 1200, 3000);
INSERT INTO jobs (job id, job title, min salary, max salary) VALUES (3,
"Purchasing Manager", 2200, 3500);
INSERT INTO jobs (job id, job title, min salary, max salary) VALUES (4,
"Purchasing clerk", 1100, 2000);
INSERT INTO jobs(job_id, job_title, min_salary, max_salary) VALUES (5,
"Marketing Representative", 1000, 1600);
INSERT INTO departments (department id, department name, location id)
VALUES (1, "Administration", 1);
INSERT INTO departments (department id, department name, location id)
VALUES (2, "Marketing", 1);
INSERT INTO departments (department id, department name, location id)
VALUES (3, "Purchasing", 1);
INSERT INTO departments (department id, department name, location id)
VALUES (4, "Human Resources", 2);
INSERT INTO departments (department id, department name, location id)
VALUES (5, "Shipping", 1);
INSERT INTO departments (department id, department name, location id)
VALUES (6, "IT", 1);
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INSERT INTO departments (department id, department name, location id)
VALUES (7, "Public Relations", 2);
INSERT INTO departments (department id, department name, location id)
VALUES (8, "Sales", 2);
INSERT INTO departments (department id, department name, location id)
VALUES (9, "Executive", 1);
INSERT INTO departments (department id, department name, location id)
VALUES (10, "Finance", 1);
INSERT INTO departments (department id, department name, location id)
VALUES (11, "Accounting", 1);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1001, "Jennifer", "Whalen", "jwhalen@example.com", "555-1234",
"2020-03-15", 1, 45000, 101, 1);
INSERT INTO employees (employee id, first name, last name, email,
phone_number, hire_date, job id, salary, manager id, department id)
VALUES (1002, "Michael", "Hartstein", "mhartstein@example.com", "555-
5678", "2018-06-22", 2, 80000, 102, 2);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1003, "Pat", "Fay", "pfay@example.com", "555-8765", "2019-01-10",
2, 50000, 102, 8);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1004, "Den", "Raphaely", "draphaely@example.com", "555-2345",
"2017-04-25", 3, 75000, 103, 5);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1005, "Alexander", "Khoo", "akhoo@example.com", "555-7890",
"2020-11-12", 5, 40000, 104, 3);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1006, "Shelli", "Baida", "sbaida@example.com", "555-4567", "2019-
07-30", 3, 38000, 104, 10);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1007, "Sigal", "Tobias", "stobias@example.com", "555-6789",
"2021-02-18", 4, 37000, 104, 3);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1008, "Guy", "Himuro", "ghimuro@example.com", "555-9876", "2018-
11-05", 5, 36000, 104, 7);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1009, "Karen", "Colmenares", "kcolmenares@example.com", "555-
5432", "2022-04-03", 3, 35000, 104, 11);
INSERT INTO employees (employee id, first name, last name, email,
phone_number, hire_date, job id, salary, manager id, department id)
VALUES (1010, 'Jennifer', 'Whalen', 'jwhalen@example.com', '555-1234',
'2020-03-15', 1, 45000, 101, 1);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
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VALUES (1011, 'Michael', 'Hartstein', 'mhartstein@example.com', '555-
5678', '2018-06-22', 2, 80000, 102, 2);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1012, 'Pat', 'Fay', 'pfay@example.com', '555-8765', '2019-01-10',
2, 50000, 102, 2);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1013, 'Den', 'Raphaely', 'draphaely@example.com', '555-2345',
'2017-04-25', 3, 75000, 103, 3);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1014, 'Alexander', 'Khoo', 'akhoo@example.com', '555-7890',
'2020-11-12', 3, 40000, 104, 3);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1015, 'Shelli', 'Baida', 'sbaida@example.com', '555-4567', '2019-
07-30', 3, 38000, 104, 3);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1016, 'Sigal', 'Tobias', 'stobias@example.com', '555-6789',
'2021-02-18', 3, 37000, 104, 3);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1017, 'Guy', 'Himuro', 'ghimuro@example.com', '555-9876', '2018-
11-05', 3, 36000, 104, 3);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1018, 'Karen', 'Colmenares', 'kcolmenares@example.com', '555-5432', '2022-04-03', 3, 35000, 104, 3);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1019, 'Emily', 'Johnson', 'ejohnson@example.com', '555-1111',
'2021-08-20', 4, 48000, 105, 4);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1020, 'James', 'Smith', 'jsmith@example.com', '555-2222', '2019-
05-12', 5, 60000, 106, 5);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1021, 'Sarah', 'Williams', 'swilliams@example.com', '555-3333',
'2020-02-28', 5, 52000, 107, 6);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1022, 'Daniel', 'Brown', 'dbrown@example.com', '555-4444', '2018-
11-15', 3, 55000, 108, 7);
INSERT INTO employees (employee id, first name, last name, email,
phone number, hire date, job id, salary, manager id, department id)
VALUES (1023, 'Jessica', 'Davis', 'jdavis@example.com', '555-5555',
'2017-07-04', 1, 45000, 109, 8);
```

```
select first_name, last_name, job_title, department_name from employees
join departments on employees.department_id = departments.department_id
join jobs on employees.job_id = jobs.job_id

SELECT
        e.department_id,
        d.department_name,
        COUNT(e.employee_id) AS headcount

FROM
        employees e

JOIN
        departments d ON e.department_id = d.department_id
```

GROUP BY

e.department_id,
d.department_name;