

Laboratory work #6

Please write SQL queries for following tasks and save as .sql file.

Use only joins.

1. Create database called «lab6»
2. Create following tables:

```
CREATE TABLE locations (  
    location_id    SERIAL PRIMARY KEY,  
    street_address VARCHAR(25),  
    postal_code    VARCHAR(12),  
    city           VARCHAR(30),  
    state_province VARCHAR(12)  
);
```

```
CREATE TABLE departments (  
    department_id    SERIAL PRIMARY KEY,  
    department_name  VARCHAR(50) UNIQUE,  
    budget           INTEGER,  
    location_id      INTEGER REFERENCES locations  
);
```

```
CREATE TABLE employees (  
    employee_id    SERIAL PRIMARY KEY,  
    first_name     VARCHAR(50),  
    last_name      VARCHAR(50),  
    email          VARCHAR(50),  
    phone_number   VARCHAR(20),  
    salary         INTEGER,  
    manager_id     INTEGER REFERENCES employees,  
    department_id  INTEGER REFERENCES departments  
);
```

```
CREATE TABLE job_grades (  
    grade          CHAR(1),  
    lowest_salary  INTEGER,  
    highest_salary INTEGER  
)
```

3. Select the first and last name, department_name, city, and state province for each employee.
4. Select the first name, last name, salary, and job grade for all employees.
5. Select the first and last name and salary for those employees who earn less than the employee whose number is 120.
(Using join)
6. Select the first name of all employees including the first name of their manager.
7. Select the first name, last name, department id and name, for all employees who have or have not any department.