SQL PROBLEMS:

Problem 1. Create a table named "Employee" with the following column specifications:

Name	Size or Format	Nulls Allowed?	Primary Key?
ssn	Social Security Number	No	Yes
lastname	Up to 40 characters	No	
firstname	Up to 30 characters	Yes	
department_code	3 integers	No	
annual_salary	Money	Yes	
hire_date	YYYY-MM-DD	No	

```
CREATE TABLE Employee
(
     ssn VARCHAR(11) NOT NULL PRIMARY KEY,
     lastname VARCHAR(40) NOT NULL,
     firstname VARCHAR(30),
     department_code INT(3) NOT NULL,
     annual_salary NUMERIC(8,2),
     hire_date DATE NOT NULL
);
```

Problem 2. Create a table named "Department" with the following column specifications:

Name	Size or Format	Nulls Allowed?	Primary Key?
department_code	3 integers	No	Yes
department_name	Up to 30 characters	No	

```
CREATE TABLE Department
(
  department_code INT(3) NOT NULL PRIMARY KEY,
  department_name VARCHAR(30) NOT NULL
);
```

Problem 3. Code the Insert statements required to add the following data to the Employee table.

Employee:
ssn: 111-22-3333
lastname: Smith
firstname: John
department_code: 234
annual_salary: $50,000
hire_date: 1999-10-15

Employee:
ssn: 222-33-4444
lastname: Jones
firstname: Mary
department_code: 234
annual_salary: $56,000
hire_date: 1998-01-02

```
INSERT INTO Employee VALUES
('111-22-3333', 'Smith', 'John', 234, 50000, '1999-10-15');

INSERT INTO Employee VALUES
('222-33-4444', 'Jones', 'Mary', 234, 56000, '1998-01-02');
```

Problem 4. Code the Insert statements required to add the following data to the Department table.

Department:
department_code: 234
department_name: Information Services

Department:
department_code: 456
department_name: Systems Group

Department:
department_code: 657
department_name: Payroll

```
INSERT INTO Department VALUES
(234, 'Information Services');

INSERT INTO Department VALUES
(456, 'Systems Group');

INSERT INTO Department VALUES
(657, 'Payroll');
```

Problem 5. Display a list of Employee Names with and their hire date.
Sort the results by Last Name.

```
SELECT  lastname, firstname, hire_date
FROM    Employee
ORDER BY lastname
;
```

Problem 6. Display the Average Salary of all the employees.

```
SELECT AVG(annual_salary) AS Average_Salary
FROM Employee
;
```

Problem 7. Code a SQL Statement that would remove John Smith from the database.
Do NOT use his SSN value to code this statement!

```
DELETE FROM Employee
WHERE lastname = 'Smith'
AND firstname = 'John';
```

Problem 8. Code a SQL Statement that would raise everyone's salary by $1000.

```
UPDATE Employee
  SET annual_salary = annual_salary + 1000;
```

Problem 9. Code a SQL Statement that would remove the Department table from the database.

```
DROP TABLE Department;
```