

Lab 2

Data Manipulating Language:

1. Insert your personal data to the employee table as a new employee in department number 30, SSN = 102672, Superssn = 112233.

⇒ INSERT INTO Employee
VALUES
('Sarah','Mohamed', 102672,'09/08/2000','Brmbal Elgdedh,
Minyat El-Nasr, Dakahlia ', 'F',73000,112233,30);

2. Insert another employee with, personal data your friend as new employee in department number 30, SSN = 102660, but don't enter any value for salary or supervisor number to him.

⇒ INSERT INTO Employee
(Fname, Lname, SSN, Bdate, Address, Sex, Dno)
VALUES
('Mariam','Mahmoud', 102660,'20/04/2000','El-Hamedia,
Minyat El-Nasr, Dakahlia', 'F',30);

3. In the department table insert new department called "DEPT IT", with id 100, employee with SSN = 112233 as a manager for this department. The start date for this manager is '1-11-2006'

⇒ INSERT INTO Departments
VALUES
('DEPT IT',100,112233,'01/11/2006');

4. Do what is required if you know that: Mrs.Noha Mohamed(SSN=968574) moved to be the manager of the new department (id = 100), and they give you (use your SSN from question1) her position (Dept. 20 manager)

a. First try to update her record in the department table
⇒ `UPDATE Departments SET MGRSSN = 968574 WHERE Dnum = 100;`

b. Update your record to be department 20 manager.
⇒ `UPDATE Departments SET MGRSSN = 102672 WHERE Dnum = 20;`

c. Update your friend data (entered in question2) to be in your teamwork (supervised by you)
⇒ `UPDATE Employee SET Superssn = 102672 WHERE SSN = 102660;`

5. Unfortunately, the company ended the contract with Mr. Kamel Mohamed (SSN=223344) so try to delete his data from your database in case you know that your friend will be temporarily in his position.

Hint: (Check if Mr. Kamel has dependents, works as a department manager, supervises any employees or works in any projects and handle these cases).

⇒ `UPDATE Employee SET Superssn = 102660 WHERE Superssn = 223344;`

⇒ `UPDATE Departments SET MGRSSN = 102660, [MGRStart Date] = '08/08/2023' WHERE MGRSSN = 223344;`

⇒ `UPDATE Works_for SET ESSn = 102660 where ESSn = 223344;`

⇒ `DELETE FROM Dependent WHERE ESSn = 223344;`

⇒ `DELETE FROM Employee WHERE SSN = 223344;`

6. And your salary has been upgraded by 20 percent of its last value.

⇒ **UPDATE Employee SET Salary = Salary * 1.2 WHERE SSN = 102672;**

Try to create the following Queries:

1. Display all the employees Data.

Select *

from employee;

⇒ **SELECT * FROM Employee;**

2. Display the employee First name, last name, Salary and Department number.

⇒ **SELECT Fname, Lname, Salary, Dno FROM Employee;**

3. Display all the projects names, locations and the department which is responsible about it.

⇒ **SELECT Pname, Plocation, Dnum FROM Project;**

4. If you know that the company policy is to pay an annual commission for each employee with specific percent equals 10% of his/her annual salary. Display each employee full name and his annual commission in an ANNUAL COMM column (alias).

⇒ **SELECT Fname+' '+lname AS [Full Name] , Salary * 12 * 0.1 AS [ANNUAL COMM] FROM Employee;**

5. Display the employees Id, name who earns more than 1000 LE monthly.

⇒ **SELECT SSN, Fname + ' ' +Lname AS [Full Name] FROM Employee WHERE Salary > 1000;**

6. Display the employees Id, name who earns more than 10000 LE annually.

⇒ `SELECT SSN, Fname+' '+Lname AS [Full Name] FROM Employee WHERE Salary * 12 > 10000;`

7. Display the names and salaries of the female employees

⇒ `SELECT Fname, Lname, Salary FROM Employee WHERE Sex = 'F';`

8. Display each department id, name which managed by a manager with id equals 968574.

⇒ `SELECT Dnum, Dname FROM Departments WHERE MGRSSN = 968574;`

9. Display the IDs, names and locations of the projects which controlled with department 10.

⇒ `SELECT Pnumber, Pname, Plocation FROM Project WHERE Dnum = 10;`