

Lab- 4

COMPANY schema

EMPLOYEE

<u>FNAME</u>	MINIT	LNAME	<u>SSN</u>	BDATE	ADDRESS	SEX	SALARY	SUPERSSN	DNO
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DEPARTMENT

<u>DNAME</u>	<u>DNUMBER</u>	MGRSSN	MGRSTARTDATE
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DEPT_LOCATIONS

<u>DNUMBER</u>	<u>DLOCATION</u>
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PROJECT

<u>PNAME</u>	<u>PNAME</u>	PLOCATION	DNUM
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WORKS_ON

<u>ESSN</u>	<u>PNO</u>	HOURS
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DEPENDENT

<u>ESSN</u>	<u>DEPENDENT_NAME</u>	SEX	BDATE	RELATIONSHIP
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1

EMPLOYEE

Fname	Minit	Lname	Ssn	Bdate	Address	Sex	Salary	Super_ssn	Dno
John	B	Smith	123456789	1965-01-09	731 Fondren, Houston, TX	M	30000	333445555	5
Franklin	T	Wong	333445555	1955-12-08	638 Voss, Houston, TX	M	40000	888665555	5
Alicia	J	Zelaya	999887777	1968-01-19	3321 Castle, Spring, TX	F	25000	987654321	4
Jenniter	S	Wallace	987654321	1941-06-20	291 Berry, Bellaire, TX	F	43000	888665555	4
Ramesh	K	Narayan	666884444	1962-09-15	975 Fire Oak, Humble, TX	M	38000	333445555	5
Joyce	A	English	453453453	1972-07-31	5631 Rice, Houston, TX	F	25000	333445555	5
Ahmad	V	Jabbar	987987987	1969-03-29	980 Dallas, Houston, TX	M	25000	987654321	4
James	E	Borg	888665555	1937-11-10	450 Stone, Houston, TX	M	55000	NULL	1

DEPARTMENT

Dname	Dnumber	Mgr_ssn	Mgr_start_date
Research	5	333445555	1988-05-22
Administration	4	987654321	1995-01-01
Headquarters	1	888665555	1981-06-19

DEPT_LOCATIONS

Dnumber	Dlocation
1	Houston
4	Stafford
5	Bellaire
5	Sugarland
5	Houston

WORKS_ON

Essn	Pno	Hours
123456789	1	32.5
123456789	2	7.5
666884444	3	40.0
453453453	1	20.0
453453453	2	20.0
333445555	2	10.0
333445555	3	10.0
333445555	10	10.0
333445555	20	10.0
999887777	30	30.0
999887777	10	10.0
987987987	10	35.0
987987987	30	5.0
987654321	30	20.0
987654321	20	15.0
888665555	20	NULL

PROJECT

Pname	Pnumber	Plocation	Dnum
ProductX	1	Bellaire	5
ProductY	2	Sugarland	5
ProductZ	3	Houston	5
Computerization	10	Stafford	4
Reorganization	20	Houston	1
Newbenefits	30	Stafford	4

DEPENDENT

Essn	Dependent_name	Sex	Bdate	Relationship
333445555	Alice	F	1986-04-05	Daughter
333445555	Theodore	M	1983-10-25	Son
333445555	Joy	F	1958-05-03	Spouse
987654321	Abner	M	1942-02-28	Spouse
123456789	Michael	M	1988-01-04	Son
123456789	Alice	F	1988-12-30	Daughter
123456789	Elizabeth	F	1967-05-05	Spouse

Questions

- 1) Retrieve the birth date and address of the employees whose name is 'john B Smith'.
- 2) Retrieve the name and address of all employees who work for 'research' department.
- 3) For every project located in 'Stafford' list the project number, the controlling department number, and the department manager's last name, address, and birth date.
- 4) Retrieve the first name, address of managers working for research department.
- 5) For each employee, retrieve the employees first and last name and the first name and last name of his or her immediate supervisor.
- 6) Select all employees SSNs and all combinations of employee SSN and Department Dname in the database.
- 7) Select all the attributes of employees who are working for department 5.
- 8) Select all attributes of employees who are working for department Administration.
- 9) Select all attributes form employee and department.
- 10) Retrieve the salary of every employee.
- 11) Retrieve distinct salary of every employee.
- 12) Make a list of all project numbers for projects that involve an employee whose last name is 'Smith' either as a worker or as a manager of the department that controls the project.(use union).
- 13) Retrieve all employees whose address is in Houston, Texas.
- 14) Find all employees who were born during the year '1950's.

- 15) Show the resulting salaries if every employee working on the product X", project is given a 10 percent raise.
- 16) Retrieve all employees in the department 5 whose salary is between 30000 and 40000.
- 17) Retrieve a list of employees and the projects they are working on, ordered by department and within each department, ordered alphabetically by last name, first name.
- 18) Delete from employee whose last name is 'brown'
- 19) Delete from employee whose ssn is '123456789'
- 20) Delete from employee where department number is 5.
- 21) Update the values of project location to 'Bellaire for dnum 5 and pnumber= 10.
- 22) Update in the table employee, where salary is incremented by 10% and dnumber is 10.
- 23) Insert the following values into employee table:

Fname	Lname	Dno	SSn
Richard	Marini	4	653298653