```sql
--6-10
CREATE SCHEMA IF NOT EXISTS COMPANY;


CREATE TABLE IF NOT EXISTS EMPLOYEE (Fname varchar(15)
                                    ,Minit varchar(1)
                                    ,Lname varchar(15)
                                    ,Ssn char(9) NOT NULL
                                    ,Bdate date
                                    ,Address varchar(50)
                                    ,Sex char(1)
                                    ,Salary decimal(10,2)
                                    ,Super_ssn char(9)
                                    ,Dno int
                                    ,PRIMARY KEY (Ssn));


CREATE TABLE IF NOT EXISTS DEPARTMENT (Dname varchar(25)
                                      ,Dnumber int NOT NULL
                                      ,Mgr_ssn char(9)
                                      ,Mgr_start_date date
                                      ,PRIMARY KEY (Dnumber)
                                      ,FOREIGN KEY (Mgr_ssn) REFERENCES
EMPLOYEE(Ssn) on delete cascade on update cascade);



ALTER TABLE EMPLOYEE ADD FOREIGN KEY (Dno) REFERENCES DEPARTMENT(Dnumber) on delete
cascade on update cascade,
FOREIGN KEY (Super_ssn) REFERENCES EMPLOYEE(Ssn) on delete cascade on update
cascade;



CREATE TABLE IF NOT EXISTS DEPT_LOCATIONS (Dnumber int NOT NULL
                                          ,Dlocation varchar(15) NOT NULL
                                          ,PRIMARY KEY (Dnumber, Dlocation)
                                          ,FOREIGN KEY (Dnumber) REFERENCES
DEPARTMENT(Dnumber) on delete cascade on update cascade);



CREATE TABLE IF NOT EXISTS PROJECT (Pname varchar(25)
                                   ,Pnumber int NOT NULL
                                   ,Plocation varchar(15)
                                   ,Dnum int NOT NULL
                                   ,PRIMARY KEY (Pnumber)
                                   ,FOREIGN KEY (Dnum) REFERENCES DEPARTMENT(Dnumber)
on delete cascade on update cascade);



CREATE TABLE IF NOT EXISTS WORKS_ON (Essn char(9) NOT NULL
                                    ,Pno int NOT NULL
                                    ,Hours decimal(4,1)
                                    ,PRIMARY KEY (Essn, Pno)
                                    ,FOREIGN KEY (Essn) REFERENCES EMPLOYEE(Ssn)
                                    ,FOREIGN KEY (Pno) REFERENCES PROJECT(Pnumber) on
delete cascade on update cascade);
```

```sql
CREATE TABLE IF NOT EXISTS DEPENDENT (Essn char(9) NOT NULL
                                     ,Dependent_name varchar(15) NOT NULL
                                     ,Sex char(1)
                                     ,Bdate date
                                     ,Relationship varchar(8)
                                     ,PRIMARY KEY (Essn, Dependent_name)
                                     ,FOREIGN KEY (Essn) REFERENCES EMPLOYEE(Ssn) on
delete cascade on update cascade);


INSERT INTO EMPLOYEE VALUES
('James','E','Borg','888665555','1937-11-10','450 Stone, Houston,
TX','M',55000,null,null);

INSERT INTO EMPLOYEE VALUES
('Franklin','T','Wong','333445555','1955-12-08','638 Voss, Houston,
TX','M',40000,'888665555',null);

INSERT INTO EMPLOYEE VALUES
('Jennifer','S','Wallace','987654321','1941-06-20','291 Berry, Bellaire,
TX','F',43000,'888665555',null);

INSERT INTO DEPARTMENT VALUES ('Research', 5, '333445555', '1988-05-22');
INSERT INTO DEPARTMENT VALUES ('Administration', 4, '987654321', '1995-01-01');
INSERT INTO DEPARTMENT VALUES ('Headquarters', 1, '888665555', '1981-06-19');


UPDATE EMPLOYEE
SET Dno = 5
WHERE Ssn = '333445555';
UPDATE EMPLOYEE
SET Dno = 4
WHERE Ssn = '987654321';
UPDATE EMPLOYEE
SET Dno = 1
WHERE Ssn = '888665555';


INSERT INTO EMPLOYEE VALUES ('John','B','Smith','123456789','1965-01-09','731
Fondren, Houston, TX','M',30000,'333445555',5);
INSERT INTO EMPLOYEE VALUES ('Alicia','J','Zelaya','999887777','1968-01-19','3321
Castle, Spring, TX','F',25000,'987654321',4);
INSERT INTO EMPLOYEE VALUES ('Ramesh','K','Narayan','666884444','1962-09-15','971
Fire Oak, Humble, TX','M',38000,'333445555',5);
INSERT INTO EMPLOYEE VALUES ('Joyce','A','English','453453453','1972-07-31','5631
Rice, Houston, TX','F',25000,'333445555',5);
INSERT INTO EMPLOYEE VALUES ('Ahmad','V','Jabbar','987987987','1969-03-29','980
Dallas, Houston, TX','M',25000,'987654321',4);

INSERT INTO DEPT_LOCATIONS VALUES (1,'Houston');
INSERT INTO DEPT_LOCATIONS VALUES (4,'Stafford');
INSERT INTO DEPT_LOCATIONS VALUES (5,'Bellaire');
INSERT INTO DEPT_LOCATIONS VALUES (5,'Sugarland');
INSERT INTO DEPT_LOCATIONS VALUES (5,'Houston');
```

```sql
INSERT INTO PROJECT VALUES ('ProductX',1,'Bellaire',5);
INSERT INTO PROJECT VALUES ('ProductY',2,'Sugarland',5);
INSERT INTO PROJECT VALUES ('ProductZ',3,'Houston',5);
INSERT INTO PROJECT VALUES ('Computerization',10,'Stafford',4);
INSERT INTO PROJECT VALUES ('Reorganization',20,'Houston',1);
INSERT INTO PROJECT VALUES ('Newbenefits',30,'Stafford',4);

INSERT INTO WORKS_ON VALUES ('123456789',1, 32.5);
INSERT INTO WORKS_ON VALUES ('123456789',2, 7.5);
INSERT INTO WORKS_ON VALUES ('666884444',3, 40.0);
INSERT INTO WORKS_ON VALUES ('453453453',1, 20.0);
INSERT INTO WORKS_ON VALUES ('453453453',2, 20.0);
INSERT INTO WORKS_ON VALUES ('333445555',2, 10.0);
INSERT INTO WORKS_ON VALUES ('333445555',3, 10.0);
INSERT INTO WORKS_ON VALUES ('333445555',10,10.0);
INSERT INTO WORKS_ON VALUES ('333445555',20,10.0);
INSERT INTO WORKS_ON VALUES ('999887777',30,30.0);
INSERT INTO WORKS_ON VALUES ('999887777',10,10.0);
INSERT INTO WORKS_ON VALUES ('987987987',10,35.0);
INSERT INTO WORKS_ON VALUES ('987987987',30, 5.0);
INSERT INTO WORKS_ON VALUES ('987654321',30,20.0);
INSERT INTO WORKS_ON VALUES ('987654321',20,15.0);
INSERT INTO WORKS_ON VALUES ('888665555',20,null);

INSERT INTO DEPENDENT VALUES ('333445555','Alice','F','1986-04-05','Daughter');
INSERT INTO DEPENDENT VALUES ('333445555','Theodore','M','1983-10-25','Son');
INSERT INTO DEPENDENT VALUES ('333445555','Joy','F','1958-05-03','Spouse');
INSERT INTO DEPENDENT VALUES ('987654321','Abner','M','1942-02-28','Spouse');
INSERT INTO DEPENDENT VALUES ('123456789','Michael','M','1988-01-04','Son');
INSERT INTO DEPENDENT VALUES ('123456789','Alice','F', '1988-12-30','Daughter');
INSERT INTO DEPENDENT VALUES ('123456789','Elizabeth','F','1967-05-05','Spouse');


--6.10-a
SELECT Fname, Lname
FROM EMPLOYEE
WHERE department = 5 AND SALARY < 3000 AND PNUMBER = 'ProductX' ;

--6.10-b
SELECT CONCAT(Fname," ",Minit," ",LName) AS EmployeeName
FROM Employee,Department
WHERE Mgr_ssn=333445555 AND Dnumber=Dno AND Address LIKE "%Houston,TX";

--6-10-c
SELECT CONCAT(Fname," ",Minit," ",Lname) AS EmployeeName,Address
FROM Employee,Works_On,Project
WHERE Pname="Computerisation" AND Pno=Pnumber AND Ssn=Essn;
```