

```
Create DATABASE elmasricompany;
```

```
-- Drop Tables
```

```
DROP TABLE IF EXISTS employee;
```

```
DROP TABLE IF EXISTS department;
```

```
DROP TABLE IF EXISTS dept_locations;
```

```
DROP TABLE IF EXISTS project;
```

```
DROP TABLE IF EXISTS works_on;
```

```
DROP TABLE IF EXISTS dependent;
```

```
-- Create Tables
```

```
CREATE TABLE employee (
```

```
  fname varchar(15) not null,
```

```
  minit varchar(1),
```

```
  lname varchar(15) not null,
```

```
  ssn char(9),
```

```
  bdate date,
```

```
  address varchar(50),
```

```
  sex char,
```

```
  salary numeric(10,2),
```

```
  superssn char(9),
```

```
  dno numeric(4),
```

```
  primary key (ssn),
```

```
  foreign key (superssn) references employee(ssn)
```

```
-- foreign key (dno) references department(dnumber)
```

```
);
```

```
CREATE TABLE department (
```

```
dname    varchar(25) not null,  
dnumber  numeric(4),  
mgrssn   char(9) not null,  
mgrstartdate date,  
primary key (dnumber),  
unique (dname),  
foreign key (mgrssn) references employee(ssn)  
);
```

```
ALTER TABLE employee  
ADD FOREIGN KEY (dno)  
REFERENCES department(dnumber);
```

```
CREATE TABLE dept_locations (  
    dnumber numeric(4),  
    dlocation varchar(15),  
    primary key (dnumber,dlocation),  
    foreign key (dnumber) references department(dnumber)  
);
```

```
CREATE TABLE project (  
    pname    varchar(25) not null,  
    pnumber  numeric(4),  
    plocation varchar(15),  
    dnum     numeric(4) not null,  
    primary key (pnumber),
```

```
unique (pname),  
foreign key (dnum) references department(dnumber)  
);
```

```
CREATE TABLE works_on (  
    essn char(9),  
    pno numeric(4),  
    hours numeric(4,1),  
    primary key (essn,pno),  
    foreign key (essn) references employee(ssn),  
    foreign key (pno) references project(pnumber)  
);
```

```
CREATE TABLE dependent (  
    essn char(9),  
    dependent_name varchar(15),  
    sex char,  
    bdate date,  
    relationship varchar(8),  
    primary key (essn,dependent_name),  
    foreign key (essn) references employee(ssn)  
);
```

```
-- Load Data
```

```
INSERT INTO employee VALUES
```

```
('James','E','Borg','888665555','1927-11-10','450 Stone, Houston, TX','M',55000,null,null);
```

```
INSERT INTO employee VALUES
```

```

('Franklin','T','Wong','333445555','1945-12-08','638 Voss, Houston, TX','M',40000,'888665555',null);
INSERT INTO employee VALUES

('Jennifer','S','Wallace','987654321','1931-06-20','291 Berry, Bellaire, TX','F',43000,'888665555',null);
INSERT INTO employee VALUES

('Jared','D','James','111111100','1966-10-10','123 Peachtree, Atlanta, GA','M',85000,null,null);
INSERT INTO employee VALUES

('Alex','D','Freed','444444400','1950-10-09','4333 Pillsbury, Milwaukee, WI','M',89000,null,null);
INSERT INTO employee VALUES

('John','C','James','555555500','1975-06-30','7676 Bloomington, Sacramento, CA','M',81000,null,null);
--

INSERT INTO department VALUES ('Research', 5, '333445555', '1978-05-22');
INSERT INTO department VALUES ('Administration', 4, '987654321', '1985-01-01');
INSERT INTO department VALUES ('Headquarters', 1, '888665555', '1971-06-19');
INSERT INTO department VALUES ('Software',6,'111111100','1999-05-15');
INSERT INTO department VALUES ('Hardware',7,'444444400','1998-05-15');
INSERT INTO department VALUES ('Sales',8,'555555500','1997-01-01');
--

UPDATE employee SET dno = 5 WHERE ssn = '333445555';
UPDATE employee SET dno = 4 WHERE ssn = '987654321';
UPDATE employee SET dno = 1 WHERE ssn = '888665555';
UPDATE employee SET dno = 6 WHERE ssn = '111111100';
UPDATE employee SET dno = 7 WHERE ssn = '444444400';
UPDATE employee SET dno = 6 WHERE ssn = '555555500';
--

INSERT INTO employee VALUES

('John','B','Smith','123456789','1955-01-09','731 Fondren, Houston, TX','M',30000,'333445555',5);
INSERT INTO employee VALUES

('Alicia','J','Zelaya','999887777','1958-07-19','3321 Castle, Spring, TX','F',25000,'987654321',4);
INSERT INTO employee VALUES

```

```
('Ramesh','K','Narayan','666884444','1952-09-15','971 Fire Oak, Humble, TX','M',38000,'333445555',5);
INSERT INTO employee VALUES

('Joyce','A','English','453453453','1962-07-31','5631 Rice Oak, Houston, TX','F',25000,'333445555',5);
INSERT INTO employee VALUES

('Ahmad','V','Jabbar','987987987','1959-03-29','980 Dallas, Houston, TX','M',25000,'987654321',4);
insert into EMPLOYEE values

('Jon','C','Jones','111111101','1967-11-14','111 Allgood, Atlanta, GA','M',45000,'111111100',6);
insert into EMPLOYEE values

('Justin',null,'03k','111111102','1966-01-12','2342 05, Atlanta, GA','M',40000,'111111100',6);
insert into EMPLOYEE values

('Brad','C','Knight','111111103','1968-02-13','176 Main St., Atlanta, GA','M',44000,'111111100',6);
insert into EMPLOYEE values

('Evan','E','Wallis','222222200','1958-01-16','134 Pelham, Milwaukee, WI','M',92000,null,7);
insert into EMPLOYEE values

('Josh','U','Zell','222222201','1954-05-22','266 McGrady, Milwaukee, WI','M',56000,'222222200',7);
insert into EMPLOYEE values

('Andy','C','Vile','222222202','1944-06-21','1967 Jordan, Milwaukee, WI','M',53000,'222222200',7);
insert into EMPLOYEE values

('Tom','G','Brand','222222203','1966-12-16','112 Third St, Milwaukee, WI','M',62500,'222222200',7);
insert into EMPLOYEE values

('Jenny','F','Vos','222222204','1967-11-11','263 05berry, Milwaukee, WI','F',61000,'222222201',7);
insert into EMPLOYEE values

('Chris','A','Carter','222222205','1960-03-21','565 Jordan, Milwaukee, WI','F',43000,'222222201',7);
insert into EMPLOYEE values

('Kim','C','Grace','333333300','1970-10-23','6677 Mills Ave, Sacramento, CA','F',79000,null,6);
insert into EMPLOYEE values

('Jeff','H','Chase','333333301','1970-01-07','145 Bradbury, Sacramento, CA','M',44000,'333333300',6);
insert into EMPLOYEE values

('Bonnie','S','Bays','444444401','1956-06-19','111 Hollow, Milwaukee, WI','F',70000,'444444400',7);
```

insert into EMPLOYEE values

('Alec','C','Best','444444402','1966-06-18','233 Solid, Milwaukee, WI','M',60000,'444444400',7);

insert into EMPLOYEE values

('Sam','S','Snedden','444444403','1977-07-31','987 Windy St, Milwaukee, WI','M',48000,'444444400',7);

insert into EMPLOYEE values

('Nandita','K','Ball','555555501','1969-04-16','222 Howard, Sacramento, CA','M',62000,'555555500',6);

insert into EMPLOYEE values

('Bob','B','Bender','666666600','1968-04-17','8794 Garfield, Chicago, IL','M',96000,null,8);

insert into EMPLOYEE values

('Jill','J','Jarvis','666666601','1966-01-14','6234 Lincoln, Chicago, IL','F',36000,'666666600',8);

insert into EMPLOYEE values

('Kate','W','King','666666602','1966-04-16','1976 Boone Trace, Chicago, IL','F',44000,'666666600',8);

insert into EMPLOYEE values

('Lyle','G','Leslie','666666603','1963-06-09','417 Hancock Ave, Chicago, IL','M',41000,'666666601',8);

insert into EMPLOYEE values

('Billie','J','King','666666604','1960-01-01','556 Washington, Chicago, IL','F',38000,'666666603',8);

insert into EMPLOYEE values

('Jon','A','Kramer','666666605','1964-08-22','1988 Windy Creek, Seattle, WA','M',41500,'666666603',8);

insert into EMPLOYEE values

('Ray','H','King','666666606','1949-08-16','213 Delk Road, Seattle, WA','M',44500,'666666604',8);

insert into EMPLOYEE values

('Gerald','D','Small','666666607','1962-05-15','122 Ball Street, Dallas, TX','M',29000,'666666602',8);

insert into EMPLOYEE values

('Arnold','A','Head','666666608','1967-05-19','233 Spring St, Dallas, TX','M',33000,'666666602',8);

insert into EMPLOYEE values

('Helga','C','Pataki','666666609','1969-03-11','101 Holyoke St, Dallas, TX','F',32000,'666666602',8);

insert into EMPLOYEE values

('Naveen','B','Drew','666666610','1970-05-23','198 Elm St, Philadelphia, PA','M',34000,'666666607',8);

insert into EMPLOYEE values

```
('Carl','E','Reedy','666666611','1977-06-21','213 Ball St, Philadelphia, PA','M',32000,'666666610',8);
insert into EMPLOYEE values
('Sammy','G','Hall','666666612','1970-01-11','433 Main Street, Miami, FL','M',37000,'666666611',8);
insert into EMPLOYEE values
('Red','A','Bacher','666666613','1980-05-21','196 Elm Street, Miami, FL','M',33500,'666666612',8);
--
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 project VALUES ('OperatingSystems',61,'Jacksonville',6);
INSERT INTO project VALUES ('DatabaseSystems',62,'Birmingham',6);
INSERT INTO project VALUES ('Middleware',63,'Jackson',6);
INSERT INTO project VALUES ('InkjetPrinters',91,'Phoenix',7);
INSERT INTO project VALUES ('LaserPrinters',92,'LasVegas',7);
--
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');
INSERT INTO dept_locations VALUES (6,'Atlanta');
INSERT INTO dept_locations VALUES (6,'Sacramento');
INSERT INTO dept_locations VALUES (7,'Milwaukee');
INSERT INTO dept_locations VALUES (8,'Chicago');
INSERT INTO dept_locations VALUES (8,'Dallas');
INSERT INTO dept_locations VALUES (8,'Philadephia');
```

```
INSERT INTO dept_locations VALUES (8,'Seattle');
INSERT INTO dept_locations VALUES (8,'Miami');
--
INSERT INTO dependent VALUES ('333445555','Alice','F','1976-04-05','D08hter');
INSERT INTO dependent VALUES ('333445555','Theodore','M','1973-10-25','Son');
INSERT INTO dependent VALUES ('333445555','Joy','F','1948-05-03','Spouse');
INSERT INTO dependent VALUES ('987654321','Abner','M','1932-02-29','Spouse');
INSERT INTO dependent VALUES ('123456789','Michael','M','1978-01-01','Son');
INSERT INTO dependent VALUES ('123456789','Alice','F','1978-12-31','D08hter');
INSERT INTO dependent VALUES ('123456789','Elizabeth','F','1957-05-05','Spouse');
INSERT INTO dependent VALUES ('444444400','Johnny','M','1997-04-04','Son');
INSERT INTO dependent VALUES ('444444400','Tommy','M','1999-06-07','Son');
INSERT INTO dependent VALUES ('444444401','Chris','M','1969-04-19','Spouse');
INSERT INTO dependent VALUES ('444444402','Sam','M','1964-02-14','Spouse');
--
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 works_on VALUES ('111111100',61,40.0);
INSERT INTO works_on VALUES ('111111101',61,40.0);
INSERT INTO works_on VALUES ('111111102',61,40.0);
INSERT INTO works_on VALUES ('111111103',61,40.0);
INSERT INTO works_on VALUES ('222222200',62,40.0);
INSERT INTO works_on VALUES ('222222201',62,48.0);
INSERT INTO works_on VALUES ('222222202',62,40.0);
INSERT INTO works_on VALUES ('222222203',62,40.0);
INSERT INTO works_on VALUES ('222222204',62,40.0);
INSERT INTO works_on VALUES ('222222205',62,40.0);
INSERT INTO works_on VALUES ('333333300',63,40.0);
INSERT INTO works_on VALUES ('333333301',63,46.0);
INSERT INTO works_on VALUES ('444444400',91,40.0);
INSERT INTO works_on VALUES ('444444401',91,40.0);
INSERT INTO works_on VALUES ('444444402',91,40.0);
INSERT INTO works_on VALUES ('444444403',91,40.0);
INSERT INTO works_on VALUES ('555555500',92,40.0);
INSERT INTO works_on VALUES ('555555501',92,44.0);
INSERT INTO works_on VALUES ('666666601',91,40.0);
INSERT INTO works_on VALUES ('666666603',91,40.0);
INSERT INTO works_on VALUES ('666666604',91,40.0);
INSERT INTO works_on VALUES ('666666605',92,40.0);
INSERT INTO works_on VALUES ('666666606',91,40.0);
INSERT INTO works_on VALUES ('666666607',61,40.0);
INSERT INTO works_on VALUES ('666666608',62,40.0);
INSERT INTO works_on VALUES ('666666609',63,40.0);
INSERT INTO works_on VALUES ('666666610',61,40.0);
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```
INSERT INTO works_on VALUES ('666666611',61,40.0);
```

```
INSERT INTO works_on VALUES ('666666612',61,40.0);
```

```
INSERT INTO works_on VALUES ('666666613',61,30.0);
```

```
INSERT INTO works_on VALUES ('666666613',62,10.0);
```

```
INSERT INTO works_on VALUES ('666666613',63,10.0);
```