

```
create table employee(fname varchar(25) not null,mname varchar(25) not null,lname varchar(25) not null,ssn char(9) not null,dob date,address varchar(50),gen char(1) check (gen in('m','f','o')),sal decimal(10,2),superssn char(9),dno int default 1,constraint ssn_pk primary key(ssn));
```

```
alter table employee add constraint dno_ch check(dno>=1 and dno<=10);
```

```
insert into employee (fname,mname,lname,ssn,dob,address,gen,sal)
values('James','E','Borg',888665555,'11-10 1937','450 stone,houston,TX','m',55000);
```

```
create table department(dname varchar(20),dno int not null,mgr_ssn char(9),mgr_start_date date,constraint mgr_ssn_fk foreign key(mgr_ssn)references employee(ssn)on delete set null)
```

```
alter table department add constraint dno_ch_dept check(dno>=1 and dno<=10)
```

```
alter table department add constraint dno_pk primary key(dno)
```

```
alter table department add constraint dname_uni unique(dname)
```

```
insert into department values('Headquarters',1,888665555,'6-19-1981')
```

```
alter table employee add constraint fk_superssn foreign key(superssn) references employee(ssn)on delete set null
```

```
insert into employee (fname,mname,lname,ssn,dob,address,gen,sal,superssn)
values('Franklin','T','Wong',333445555,'12-8-1955','638 voss,houston,TX','m',40000,888665555);
```

```
alter table employee add constraint dno_fk foreign key(dno)references department(dno) on delete cascade;
```

```
update employee set dno=5 where ssn=333445555
```

```
update employee set dno=4 where ssn=987654321
```

```
create table dept_loc (dnum integer,dloc varchar(20) not null,primary key(dnum,dloc)); alter table dept_loc add constraint fk_dnum foreign key (dnum) references department(dno) on delete cascade
```

```
desc dept_loc
```

```
insert into dept_loc values(1,'Houston')
```

```
create table project(pname varchar(20) not null,pnum integer,ploc varchar(20) not null,dnum integer,primary key(pnum))
```

```
alter table project add constraint fk_pdnum foreign key (dnum) references department(dno) on delete cascade
```

```
alter table project add constraint uni_dno unique(pname)
```

```
desc project
```

```
insert into project values('ProductX',1,Bellaire,5)
```

```
create table works_on(essn char(9),pno integer,hours decimal(4,1)not null,primary key(essn,pno))
```

```
alter table works_on add constraint fk_pno foreign key (pno)references project(pnum) on delete cascade
```

```
alter table works_on add constraint fk_essn foreign key (essn) references employee(ssn) on delete cascade
```

```
insert into works_on values(:essn,:pno,:hrs)
```

```
create table dependent(essn char(9),dep_name varchar(20),gen char(1),bdate date,relationship varchar(20),check (gen in('m','f')),primary key(essn,dep_name)) desc dependent
```

```
alter table dependent add constraint fk_dep_essn foreign key(essn) references employee(ssn) on delete cascade
```

```
insert into dependent values(:essn,:name,:gen,:bday,:relation)
```