**TASK1**

**DROP DATABASE IF EXISTS `TASK1`;**

**CREATE DATABASE `TASK1`;**

**USE `TASK1`;**

**CREATE TABLE EMPLOYEE(**

**Fname VARCHAR(15) NOT NULL,**

**Minit CHAR,**

**Lname VARCHAR(15) NOT NULL,**

**Ssn CHAR(9) NOT NULL,**

**Bdate DATE,**

**Address VARCHAR(30),**

**Sex CHAR,**

**Salary DECIMAL(10,2),**

**Super\_ssn CHAR(9) NOT NULL,**

**Dno INT,**

**PRIMARY KEY (Ssn)**

**);**

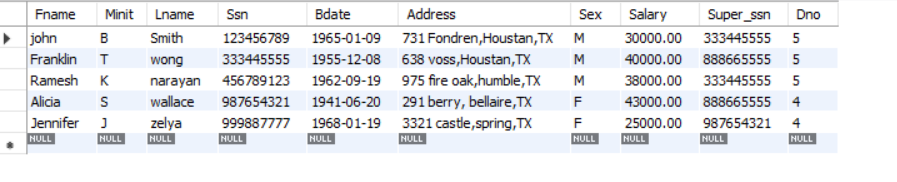
**INSERT INTO `EMPLOYEE` VALUES ('john','B','Smith','123456789','1965-01-09','731 Fondren,Houstan,TX','M',30000,'333445555',5);**

**INSERT INTO `EMPLOYEE` VALUES ('Franklin','T','wong','333445555','1955-12-08','638 voss,Houstan,TX','M',40000,'888665555',5);**

**INSERT INTO `EMPLOYEE` VALUES ('Jennifer','J','zelya','999887777','1968-01-19','3321 castle,spring,TX','F',25000,'987654321',4);**

**INSERT INTO `EMPLOYEE` VALUES ('Alicia','S','wallace','987654321','1941-06-20','291 berry, bellaire,TX','F',43000,'888665555',4);**

**INSERT INTO `EMPLOYEE` VALUES ('Ramesh','K','narayan','456789123','1962-09-19','975 fire oak,humble,TX','M',38000,'333445555',5);**

****

**CREATE TABLE DEPARTMENT(**

**Dname varchar(15) NOT NULL,**

**Dnumber int not null,**

**Mgr\_ssn char(9) not null,**

**Mgr\_start\_date date,**

**PRIMARY KEY (Dnumber),**

**UNIQUE (Dname),**

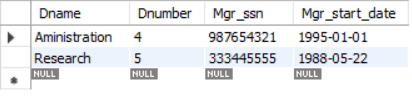
**FOREIGN KEY (Mgr\_ssn) REFERENCES EMPLOYEE(Ssn)**

**);**

**INSERT INTO `DEPARTMENT` VALUES ('Research',5,'333445555','1988-05-22');**

**INSERT INTO `DEPARTMENT` VALUES ('Aministration',4,'987654321','1995-01-01');**

**INSERT INTO `DEPARTMENT` VALUES ('Headquarters',1,'888665555','1981-06-19'); -- give error**

****

**CREATE TABLE DEPT\_LOCATIONS(**

**Dnumber int not null,**

**Dlocation varchar(15) not null,**

**PRIMARY KEY (Dnumber, Dlocation),**

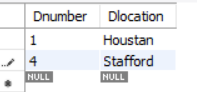
**FOREIGN KEY (Dnumber) REFERENCES DEPARTMENT(Dnumber)**

**);**

**INSERT INTO `DEPT\_LOCATIONS` VALUES (1,'Houstan'); -- give error**

**INSERT INTO `DEPT\_LOCATIONS` VALUES (4,'stafford'); -- give error**

**INSERT INTO `DEPT\_LOCATIONS` VALUES (5,'bellaire'); -- give error**

****

**CREATE TABLE PROJECT(**

**Pname varchar(15) not null,**

**Pnumber int not null,**

**Plocation varchar(15),**

**Dnum int not null,**

**PRIMARY KEY (Pnumber),**

**UNIQUE (Pname),**

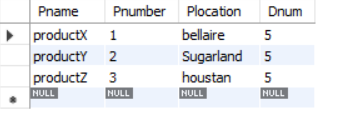
**FOREIGN KEY (Dnum) REFERENCES DEPARTMENT(Dnumber)**

**);**

**INSERT INTO `PROJECT` VALUES ('productX',1,'bellaire',5);**

**INSERT INTO `PROJECT` VALUES ('productY',2,'Sugarland',5);**

**INSERT INTO `PROJECT` VALUES ('productZ',3,'houstan',5);**

****

**CREATE TABLE WORKS\_ON(**

**Essn char(9) not null,**

**Pno int not null,**

**Hours DECIMAL(3,1) not null,**

**PRIMARY KEY (Essn, Pno),**

**FOREIGN KEY (Essn) REFERENCES EMPLOYEE(Ssn),**

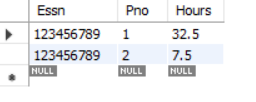
**FOREIGN KEY (Pno) REFERENCES PROJECT(Pnumber)**

**);**

**INSERT INTO `WORKS\_ON` VALUES ('123456789',1,32.5);**

**INSERT INTO `WORKS\_ON` VALUES ('123456789',2,7.5);**

**INSERT INTO `WORKS\_ON` VALUES ('666885555',3,40.0);**

****

**CREATE TABLE DEPENDENT(**

**Essn char(9) not null,**

**Dependent\_name varchar(15) not null,**

**Sex char,**

**Bdate date,**

**Relationship varchar(8),**

**PRIMARY KEY (Essn, Dependent\_name),**

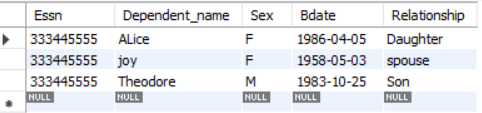
**FOREIGN KEY (Essn) REFERENCES EMPLOYEE(Ssn)**

**);**

**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');**

****

**TASK2**

**drop database if exists `task2`;**

**create database`task2`;**

**use `task2`;**

**create table airport(**

**`airport\_code` varchar(15) not null,**

**`name` varchar(15) not null,**

**`city` varchar(20) not null,**

**`state` varchar(20) not null,**

**primary key(airport\_code)**

**);**

**insert into`airport` values();**

**create table flight(**

**`flight\_number` varchar(25) not null,**

**`airline` varchar(15) not null,**

**`weekdays` varchar(20) not null,**

**primary key(flight\_number)**

**);**

**insert into`flight\_number` values();**

**create table flight\_leg(**

**`leg\_number` varchar(25) not null,**

**`departure\_airport\_code` varchar(30) not null,**

**`scheduled\_departure\_time` int not null,**

**`arrival\_airport\_code` varchar(30) not null,**

**`scheduled\_arrival\_time` int not null,**

**primary key(flight\_number,leg\_number),**

**foreign key(fight\_number)references flight(flight\_number)**

**);**

**insert into`flight\_leg` values();**

**create table leg\_instance(**

**`date` date not null,**

**`number\_of\_available\_seats` int not null,**

**`airplane\_id` varchar(15) not null,**

**`departure\_airport\_code` varchar(20) not null,**

**`departure\_time` double(2,2) not null,**

**`arrival\_airport\_code` varchar(20) not null,**

**`arrival\_time` int not null,**

**primary key(flight\_number,leg\_number,date),**

**foreign key(flight\_number)references flight(flight\_number),**

**foreign key(leg\_number)references flight\_leg(leg\_number)**

**);**

**insert into`leg\_instance` values();**

**create table fare(**

**`fare\_code` int(20)not null,**

**`amount` int not null,**

**`restrictions` varchar(25),**

**primary key(flight\_number,fare\_code),**

**foreign key(flight\_number)references flight(flight\_number)**

**);**

**insert into`fare` values();**

**create table airplane\_type(**

**`airplane\_type\_name` varchar(20)not null,**

**`max\_seats` int not null,**

**`company` varchar(20) not null,**

**primary key(airplane\_type\_name)**

**);**

**create table can\_land(**

**`airport\_code` varchar(15) not null,**

**primary key(airplane\_type\_name,airport\_code),**

**foreign key(airplane\_type\_name)references airplane\_type(airplane\_type\_name),**

**foreign key(airport\_code)references airport(airport\_code)**

**);**

**create table airplane(**

**`airplane\_id` int not null,**

**`total\_number\_of\_seats` int not null,**

**`airplane\_type` varchar(20) not null,**

**primary key(airplane\_id),**

**foreign key(airplane\_id)references leg\_instance(airplane\_id)**

**);**

**create table seat\_reservation(**

**`date` date not null,**

**`seat\_number` int not null,**

**`customer\_name` varchar(20),**

**`customer\_phone` int not null,**

**primary key(flight\_number,leg\_number,date,seat\_number),**

**foreign key(flight\_number)references flight(flight\_number),**

**foreign key(leg\_number)references flight\_leg(leg\_number),**

**foreign key(date)references leg\_instance(date)**

**);**