
```
DROP DATABASE IF EXISTS empinfo;
```

```
CREATE DATABASE empinfo;
```

```
USE empinfo;
```

```
CREATE TABLE Department (  
    DNum INT PRIMARY KEY IDENTITY(1,1),  
    DName NVARCHAR(20) NOT NULL,  
    MgrSSN int,  
    HireDate DATE
```

```
);
```

```
CREATE TABLE Employee (  
    SSN INT PRIMARY KEY,  
    BD DATE,  
    Gender BIT DEFAULT 0,  
    FName NVARCHAR(20),  
    LName NVARCHAR(20),  
    DNum INT,  
    Superid INT,  
    FOREIGN KEY (DNum) REFERENCES Department(DNum),  
    FOREIGN KEY (Superid) REFERENCES Employee(SSN)
```

```
);
```

```
ALTER TABLE Department  
ADD CONSTRAINT FK_Department_MgrSSN  
FOREIGN KEY (MgrSSN) REFERENCES Employee(SSN);
```

```
CREATE TABLE Locations (  
    DNum INT,  
    Loc VARCHAR(100),  
    PRIMARY KEY (DNum, Loc),  
    FOREIGN KEY (DNum) REFERENCES Department(DNum)
```

```
);
```

```
CREATE TABLE Project (  
    PNum INT PRIMARY KEY,  
    PName NVARCHAR(20),  
    City NVARCHAR(20),  
    Loc NVARCHAR(50),  
    DNum INT,  
    FOREIGN KEY (DNum) REFERENCES Department(DNum)
```

```
);
```

```
CREATE TABLE Dependent (  
    SSN INT,  
    DeptName NVARCHAR(60),  
    Gender CHAR(1),  
    Birthday DATE,  
    PRIMARY KEY (SSN, DeptName),  
    FOREIGN KEY (SSN) REFERENCES Employee(SSN)
```

```
);
```

```
CREATE TABLE MyWork (  
    SSN INT,  
    PNum INT,  
    Hours INT,  
    PRIMARY KEY (SSN, PNum),  
    FOREIGN KEY (SSN) REFERENCES Employee(SSN),  
    FOREIGN KEY (PNum) REFERENCES Project(PNum)  
);  
  
INSERT INTO Department (DName, MgrSSN, HireDate) VALUES  
( 'Marketing', NULL, '2023-01-15'),  
( 'IT', NULL, '2023-02-20'),  
( 'Finance', NULL, '2023-03-10');  
  
SELECT * FROM Employee;  
DELETE FROM Employee WHERE SSN IS NULL;  
  
INSERT INTO Employee (SSN, BD, Gender, FName, LName, DNum, Superid) VALUES  
(1, '2000-06-15', 0, 'Nouf', 'Al-Rashdi', 1, NULL),  
(2, '2002-03-22', 0, 'Maisam', 'Al-Khusaibi', 2, 1),  
(3, '1998-11-30', 0, 'Manal', 'Al-Nabhani', 3, 1);  
  
INSERT INTO Locations (DNum, Loc) VALUES  
(1, 'Muscat'),  
(2, 'Dhofar'),  
(3, 'Sohar');  
  
INSERT INTO Project (PNum, PName, City, Loc, DNum) VALUES  
(1, 'Oman E-Government Portal', 'Muscat', 'Office A', 2),  
(2, 'National Payroll System', 'Salalah', 'Office B', 3);  
  
EXEC sp_help 'Project';  
ALTER TABLE Project ALTER COLUMN PName VARCHAR(100);  
  
INSERT INTO Project (PNum, PName, City, Loc, DNum) VALUES  
(1, 'Oman E-Gov Portal', 'Muscat', 'Office A', 2),  
(2, 'National Payroll Sys', 'Salalah', 'Office B', 3);  
  
INSERT INTO Dependent (SSN, DeptName, Gender, Birthday) VALUES  
(1, 'HR Department', 'F', '2010-05-10'),  
(2, 'IT Department', 'M', '2015-08-20');  
  
INSERT INTO MyWork (SSN, PNum, Hours) VALUES  
(1, 1, 40),  
(2, 1, 35),  
(3, 2, 30);
```