

CREATE DATABASE INSTITUTION

USE INSTITUTION

```
CREATE TABLE Employee (  
    SSN INT PRIMARY KEY,  
    FName VARCHAR (30) NOT NULL,  
    LName VARCHAR (30) NOT NULL,  
    Gender VARCHAR (20),  
    Birthdate DATE,  
    DNum INT,  
    SuperID INT,  
    FOREIGN KEY (SuperID) REFERENCES Employee (SSN)  
);
```

```
INSERT INTO Employee (SSN, FName, LName, Gender, Birthdate, DNum, SuperID)  
VALUES ('111223333', 'David', 'Lee', 'M', '1988-11-30', 1, '0');
```

```
INSERT INTO Employee (SSN, FName, LName, Gender, Birthdate, DNum, SuperID)  
VALUES  
(111223333, 'David', 'Lee', 'M', '1988-11-30', 1, NULL),  
(356895432, 'Jane', 'Brown', 'F', '1980-01-01', 1, NULL),  
(874249645, 'Tom', 'Green', 'M', '1975-03-12', 1, NULL);
```

```
INSERT INTO Employee (SSN, FName, LName, Gender, Birthdate, DNum, SuperID)  
VALUES  
(222222222, 'Sara', 'White', 'F', '1993-02-10', 1, 356895432),  
(111111111, 'Ali', 'Khan', 'M', '1989-08-21', 1, 111223333),  
(555555555, 'Muna', 'Ramirez', 'F', '1990-12-03', 1, 874249645);
```

```
SELECT * FROM Employee
```

	SSN	FName	LName	Gender	Birthdate	DNum	SuperID
1	111111111	Ali	Khan	M	1989-08-21	1	111223333
2	111223333	David	Lee	M	1988-11-30	1	NULL
3	222222222	Sara	White	F	1993-02-10	1	356895432
4	356895432	Jane	Brown	F	1980-01-01	1	NULL
5	555555555	Muna	Rami...	F	1990-12-03	1	874249645
6	874249645	Tom	Green	M	1975-03-12	1	NULL

```
CREATE TABLE Department (
    DNum INT PRIMARY KEY,
    DName VARCHAR (50) NOT NULL,
    ManagerSSN INT,
    HIRE_DATE DATE,
    FOREIGN KEY (ManagerSSN) REFERENCES Employee (SSN),
);
```

```
INSERT INTO Department (DNum, DName, ManagerSSN, HIRE_DATE)
VALUES
(1, 'Marketing', 111223333, '2010-06-01'),
(2, 'HR', 111223333, '2012-03-15'),
(3, 'IT', 111223333, '2015-08-22');
```

```
SELECT * FROM Department
```

	DNum	DName	ManagerSSN	HIRE_DATE
1	1	Marketing	111223333	2010-06-01
2	2	HR	111223333	2012-03-15
3	3	IT	111223333	2015-08-22

```
CREATE TABLE Locations (
    DNum INT,
    LocationName VARCHAR (50),
    primary key (DNum, LocationName),
    FOREIGN KEY (DNum) REFERENCES Department (DNum)
);
```

```
INSERT INTO Locations (DNum, LocationName)
VALUES
(1, 'Muscat'),
(2, 'Salalah'),
(3, 'Sur');
```

```
SELECT * FROM Locations
```

	DNum	LocationName
1	1	Muscat
2	2	Salalah
3	3	Sur

```

CREATE TABLE Dependant (
    DName VARCHAR (20),
    Gender VARCHAR (20),
    Birthdate Date,
    SSN INT,
    FOREIGN KEY (SSN) REFERENCES Employee (SSN),
    PRIMARY KEY (DName, SSN)
);

```

```

INSERT INTO Dependant (DName, Gender, Birthdate, SSN)
VALUES
('Alya', 'F', '2015-05-10', 222222222),
('Fatma', 'F', '2012-11-23', 111111111),
('Ahmed', 'M', '2018-07-14', 555555555);

```

```

SELECT * FROM Dependant

```

	DName	Gender	Birthdate	SSN
1	Ahmed	M	2018-07-14	555555555
2	Alya	F	2015-05-10	222222222
3	Fatma	F	2012-11-23	111111111

```

CREATE TABLE Project(
    PNum INT PRIMARY KEY,
    PName VARCHAR(20) NOT NULL,
    City VARCHAR (20),
    LocationS VARCHAR (30),
    DNum INT,
    FOREIGN KEY (DNum) REFERENCES Department (DNum),
);

```

```

INSERT INTO Project (PNum, PName, City, LocationS, DNum)
VALUES
(101, 'Alpha', 'Muscat', 'Muscat Office', 1),
(102, 'Beta', 'Salalah', 'Salalah Branch', 2),
(103, 'Gamma', 'Sur', 'Sur Site', 3);

```

```

SELECT * FROM Project

```

	PNum	PName	City	LocationS	DNum
1	101	Alpha	Muscat	Muscat Office	1
2	102	Beta	Salalah	Salalah Branch	2
3	103	Gamma	Sur	Sur Site	3

```
CREATE TABLE Work (  
    SSN INT,  
    PNum INT,  
    WORKING_HOURS INT,  
    FOREIGN KEY (SSN) REFERENCES Employee (SSN),  
    FOREIGN KEY (PNum) REFERENCES Project (PNum),  
);
```

```
INSERT INTO Work (SSN, PNum, WORKING_HOURS)  
VALUES  
('222222222', 101, 40);
```

```
SELECT * FROM Work
```

	SSN	PNum	WORKING_HOURS
1	222222222	101	40