Exp_3

```sql
CREATE DATABASE Company;
USE Company;

-- Creating the EMPLOYEE table
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),
 Dno INT NOT NULL,
 PRIMARY KEY (Ssn)
);


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)
);

-- Creating the DEPT_LOCATIONS table
CREATE TABLE DEPT_LOCATIONS (
 Dnumber INT NOT NULL,
 Dlocation VARCHAR(15) NOT NULL,
 PRIMARY KEY (Dnumber, Dlocation),
 FOREIGN KEY (Dnumber) REFERENCES DEPARTMENT(Dnumber)
);
-- Creating the PROJECT table
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)
);
-- Creating the WORKS_ON table
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)
);
-- Creating the DEPENDENT table
CREATE TABLE DEPENDENT (
 Essn CHAR(9) NOT NULL,
 Dependent_name VARCHAR(15) NOT NULL,
```

Exp_3

```sql
  Sex CHAR,
  Bdate DATE,
  Relationship VARCHAR(8),
  PRIMARY KEY (Essn, Dependent_name),
  FOREIGN KEY (Essn) REFERENCES EMPLOYEE(Ssn)
);
ALTER TABLE EMPLOYEE;

-- Inserting data into the DEPARTMENT table
INSERT INTO DEPARTMENT (Dname, Dnumber, Mgr_ssn, Mgr_start_date) VALUES
('Research', 5, '333445555', '1988-05-22'),
('Administration', 4, '987654321', '1995-01-01'),
('Headquarters', 1, '888665555', '1981-06-19');
-- Inserting data into the EMPLOYEE table

INSERT INTO EMPLOYEE (Fname, Minit, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn,
Dno) VALUES
('John', 'B', 'Smith', '123456789', '1965-01-09', '731 Fondren, Houston TX', 'M', 30000,
'333445555', 5),
('Franklin', 'T', 'Wong', '333445555', '1965-12-08', '638 Voss, Houston TX', 'M', 40000,
'888665555', 5),
('Alicia', 'J', 'Zelaya', '999887777', '1968-01-19', '3321 Castle, Spring TX', 'F', 25000,
'987654321', 4),
('Jennifer', 'S', 'Wallace', '987654321', '1941-06-20', '291 Berry, Bellaire TX', 'F', 43000,
'888665555', 4),
('Ramesh', 'K', 'Narayan', '666884444', '1962-09-15', '975 Fire Oak, Humble TX', 'M', 38000,
'333445555', 5),
('Joyce', 'A', 'English', '453453453', '1972-07-31', '5631 Rice, Houston TX', 'F', 25000,
'333445555', 5),
('Ahmad', 'V', 'Jabbar', '987987987', '1969-03-29', '980 Dallas, Houston TX', 'M', 25000,
'987654321', 4),
('James', 'E', 'Borg', '888665555', '1937-11-10', '450 Stone, Houston TX', 'M', 55000, NULL, 1);

-- Inserting missing projects into the PROJECT table
INSERT INTO PROJECT (Pname, Pnumber, Plocation, Dnum) VALUES
('ProductX', 1, 'Bellaire', 5),
('ProductY', 2, 'Sugarland', 5),
('ProductZ', 3, 'Houston', 5);

-- Inserting data into the WORKS_ON table
INSERT INTO WORKS_ON (Essn, Pno, Hours) VALUES
('123456789', 1, 32.5),
('123456789', 2, 7.5),
('666884444', 3, 40.0),
('453453453', 1, 20.0);


select * from PROJECT;
```