Damanpreet Singh

SAP ID- 500119063

<u>Lab</u> – <u>17</u>

create database lab17;

use lab17;

-- Create DEPARTMENT table first (no foreign keys yet)

CREATE TABLE DEPARTMENT (

   Dname VARCHAR(15) NOT NULL UNIQUE,

   Dnumber INT NOT NULL PRIMARY KEY,

   Mgr_ssn CHAR(9) NOT NULL,

   Mgr_start_date DATE

);

-- Create EMPLOYEE table next (references DEPARTMENT table)

CREATE TABLE EMPLOYEE (

   Fname VARCHAR(15) NOT NULL,

   Minit CHAR,

   Lname VARCHAR(15) NOT NULL,

   Ssn CHAR(9) NOT NULL PRIMARY KEY,

   Bdate DATE,

   Address VARCHAR(30),

   Sex CHAR,

   Salary DECIMAL(10, 2),

   Super_ssn CHAR(9),

   Dno INT NOT NULL,

   FOREIGN KEY (Super_ssn) REFERENCES EMPLOYEE(Ssn),

```sql
    FOREIGN KEY (Dno) REFERENCES DEPARTMENT(Dnumber)
);


-- Create DEPT_LOCATIONS table (references DEPARTMENT table)
CREATE TABLE DEPT_LOCATIONS (
    Dnumber INT NOT NULL,
    Dlocation VARCHAR(15) NOT NULL,
    PRIMARY KEY (Dnumber, Dlocation),
    FOREIGN KEY (Dnumber) REFERENCES DEPARTMENT(Dnumber)
);


-- Create PROJECT table (references DEPARTMENT table)
CREATE TABLE PROJECT (
    Pname VARCHAR(15) NOT NULL UNIQUE,
    Pnumber INT NOT NULL PRIMARY KEY,
    Plocation VARCHAR(15),
    Dnum INT NOT NULL,
    FOREIGN KEY (Dnum) REFERENCES DEPARTMENT(Dnumber)
);


-- Create WORKS_ON table (references EMPLOYEE and PROJECT tables)
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),
```

```sql
    FOREIGN KEY (Pno) REFERENCES PROJECT(Pnumber)
);


-- Create DEPENDENT table (references EMPLOYEE table)
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)
);
```