**Lab – 17**

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),

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),

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)

);