

EXPERIMENT 3

Name :- Akshit Saigal

SAP :-500120161

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1  -- Akshit saigal
2  -- 500120161
3  ● ○ CREATE TABLE EMPLOYEE (
4      Fname VARCHAR(15) NOT NULL,
5      Minit CHAR,
6      Lname VARCHAR(15) NOT NULL,
7      Ssn CHAR(9) NOT NULL,
8      Bdate DATE,
9      Address VARCHAR(30),
10     Sex CHAR,
11     Salary DECIMAL(10,2),
12     Super_ssn CHAR(9),
13     Dno INT NOT NULL,
14     PRIMARY KEY (Ssn)
15 );
16 ● ○ CREATE TABLE DEPARTMENT (
17     Dname VARCHAR(15) NOT NULL,
18     Dnumber INT NOT NULL,
19     Mgr_ssn CHAR(9) NOT NULL,
20     Mgr_start_date DATE,
21     PRIMARY KEY (Dnumber),
22     UNIQUE (Dname),
23     FOREIGN KEY (Mgr_ssn) REFERENCES EMPLOYEE(Ssn)
24 );
25 ● ALTER TABLE EMPLOYEE
26 ADD CONSTRAINT fk_super_ssn FOREIGN KEY (Super_ssn) REFERENCES EMPLOYEE(Ssn);
27
28 ● ALTER TABLE EMPLOYEE
29 ADD CONSTRAINT fk_dno FOREIGN KEY (Dno) REFERENCES DEPARTMENT(Dnumber);
30
31 ● ○ CREATE TABLE DEPT_LOCATIONS (
32     Dnumber INT NOT NULL,
33     Dlocation VARCHAR(15) NOT NULL
34 );
```

```
INSERT INTO EMPLOYEE (Fname, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno)
VALUES
('James', 'Borg', '888665555', '1937-11-10', '450 Stone, Houston TX', 'M', 55000, NULL, 1);
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```
INSERT INTO EMPLOYEE (Fname, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno)
VALUES
('Franklin', 'Wong', '333445555', '1965-12-08', '638 Voss, Houston TX', 'M', 40000, '888665555', 5),
('Jennifer', 'Wallace', '987654321', '1941-06-20', '291 Berry, Bellaire TX', 'F', 43000, '888665555', 4);
```

```
INSERT INTO EMPLOYEE (Fname, Lname, Ssn, Bdate, Address, Sex, Salary, Super_ssn, Dno)
VALUES
('John', 'Smith', '123456789', '1965-01-09', '731 Fondren, Houston TX', 'M', 30000, '333445555', 5),
('Ramesh', 'Narayan', '666884444', '1962-09-15', '975 Fire Oak, Humble TX', 'M', 38000, '333445555', 5),
('Joyce', 'English', '453453453', '1972-07-31', '5631 Rice, Houston TX', 'F', 25000, '333445555', 5),
('Alicia', 'Zelaya', '999887777', '1968-01-19', '3321 Castle, Spring TX', 'F', 25000, '987654321', 4),
('Ahmad', 'Jabbar', '987987987', '1969-03-29', '980 Dallas, Houston TX', 'M', 25000, '987654321', 4);
```

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

```
INSERT INTO DEPT_LOCATIONS (Dnumber, Dlocation)
VALUES
```

```
(1, 'Houston'),
(4, 'Stafford'),
(5, 'Bellaire'),
(5, 'Houston'),
(5, 'Sugarland');
```

							Salary	Super_ssn	Dno
							30000.00	333445555	5
							40000.00	888665555	5
							25000.00	333445555	5
							38000.00	333445555	5
	James	Borg	888665555	1937-11-10	450 Stone, Houston TX	M	55000.00	NULL	1
	Jennifer	Wallace	987654321	1941-06-20	291 Berry, Bellaire TX	F	43000.00	888665555	4
	Ahmad	Jabbar	987987987	1969-03-29	980 Dallas, Houston TX	M	25000.00	987654321	4
	Alicia	Zelaya	999887777	1968-01-19	3321 Castle, Spring TX	F	25000.00	987654321	4
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

	Dname	Dnumber	Mgr_ssn	Mgr_start_date
▶	Headquarters	1	888665555	1981-06-19
	Administration	4	987654321	1995-01-01
	Research	5	333445555	1988-05-22
*	NULL	NULL	NULL	NULL

	Dnumber	Dlocation
▶	1	Houston
	4	Stafford
	5	Bellaire
	5	Houston
	5	Sugarland

```

8 ● ○ CREATE TABLE PROJECT (
9     Pname VARCHAR(15) NOT NULL,
10    Pnumber INT NOT NULL,
11    Plocation VARCHAR(15),
12    Dnum INT NOT NULL,
13    PRIMARY KEY (Pnumber),
14    UNIQUE (Pname),
15    FOREIGN KEY (Dnum) REFERENCES DEPARTMENT(Dnumber)
16 );
17
18 ● ○ CREATE TABLE WORKS_ON (
19     Essn CHAR(9) NOT NULL,
20     Pno INT NOT NULL,
21     Hours DECIMAL(3,1) NOT NULL,
22     PRIMARY KEY (Essn, Pno),
23     FOREIGN KEY (Essn) REFERENCES EMPLOYEE(Ssn),
24     FOREIGN KEY (Pno) REFERENCES PROJECT(Pnumber)
25 );
26
27 ● ○ CREATE TABLE DEPENDENT (
28     Essn CHAR(9) NOT NULL,
29     Dependent_name VARCHAR(15) NOT NULL,
30     Sex CHAR,
31     Bdate DATE,
32     Relationship VARCHAR(8),
33     PRIMARY KEY (Essn, Dependent_name),
34     FOREIGN KEY (Essn) REFERENCES EMPLOYEE(Ssn)
35 );

```

```

INSERT INTO PROJECT (Pname, Pnumber, Plocation, Dnum)
VALUES
('ProductX', 1, 'Bellaire', 5),
('ProductY', 2, 'Sugarland', 5),
('ProductZ', 3, 'Houston', 5),
('Computerization', 10, 'Stafford', 4),
('Reorganization', 20, 'Houston', 1),
('Newbenefits', 30, 'Stafford', 4);

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```
INSERT INTO WORKS_ON (Essn, Pno, Hours)
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```
VALUES
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```
('123456789', 1, 32.5),
('123456789', 2, 7.5),
('666884444', 3, 40.0),
('453453453', 1, 20.0),
('453453453', 2, 20.0),
('333445555', 2, 10.0),
('333445555', 3, 10.0),
('333445555', 10, 10.0),
('333445555', 20, 10.0),
('999887777', 30, 30.0),
('999887777', 10, 10.0),
('987987987', 10, 35.0),
('987987987', 30, 5.0),
('987654321', 30, 20.0),
('987654321', 20, 15.0),
('888665555', 20, 0.0);
```

```
INSERT INTO DEPENDENT (Essn, Dependent_name, Sex, Bdate, Relationship)
```

```
VALUES
```

```
('333445555', 'Alice', 'F', '1986-04-04', 'Daughter'),
('333445555', 'Theodore', 'M', '1983-10-25', 'Son'),
('333445555', 'Joy', 'F', '1958-05-03', 'Spouse'),
('987654321', 'Abner', 'M', '1942-02-28', 'Spouse'),
('123456789', 'Michael', 'M', '1988-01-04', 'Son'),
('123456789', 'Alice', 'F', '1988-12-30', 'Daughter'),
('123456789', 'Elizabeth', 'F', '1967-05-05', 'Spouse');
```

	Pname	Pnumber	Plocation	Dnum
▶	ProductX	1	Bellaire	5
	ProductY	2	Sugarland	5
	ProductZ	3	Houston	5
	Computerization	10	Stafford	4
	Reorganization	20	Houston	1

	Essn	Pno	Hours
▶	123456789	1	32.5
	123456789	2	7.5
	333445555	2	10.0
	333445555	3	10.0
	333445555	10	10.0
	333445555	20	10.0
	453453453	1	20.0
	453453453	2	20.0
	666884444	3	40.0
	888665555	20	0.0
	987654321	20	15.0
	987654321	30	20.0
	987987987	10	35.0
	987987987	30	5.0
	999887777	10	10.0
	999887777	30	30.0
✱	NULL	NULL	NULL

	Essn	Dependent_name	Sex	Bdate	Relationship
▶	123456789	Alice	F	1988-12-30	Daughter
	123456789	Elizabeth	F	1967-05-05	Spouse
	123456789	Michael	M	1988-01-04	Son
	333445555	Alice	F	1986-04-04	Daughter
	333445555	Joy	F	1958-05-03	Spouse
	333445555	Theodore	M	1983-10-25	Son
	987654321	Abner	M	1942-02-28	Spouse
★	NULL	NULL	NULL	NULL	NULL