

Shady Oak Furniture

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Database Scenario

The COMPANY database keeps track of a company's employees, departments, and projects

The company is organized into departments. Each department has a unique name, a unique number, and a particular employee who manages the department. We keep track of the start date when the employee began managing the department. A department may have several locations.

A department controls a number of projects. Each project has a unique name, a unique number and multiple locations.

We store each employee's name, social security number, address, salary, sex and birthday. An employee is assigned to one department but may work on several projects, which are not necessarily controlled by the same department.

We keep track of the number of hours per week that an employee works on each project. We also keep track of the direct supervisor of each employee. An employee must be either full-time or part-time.

We want to keep track of the dependents of each employee for insurance purpose. We keep each dependent's name, sex, birthday and relationship to the employees.

Business Rules

One employee must work for one and only one department.
One department must have 4 or more employees.

One employee may manage one and only one department.
One department must be managed by one and only employee.

One department may control one or more projects.
One project must be controlled by one and only one department.

One employee must work on one or many projects.
One project must have one or many employees to work on.

One employee may have one or more dependents.
One dependent must belong to one and only one employee.

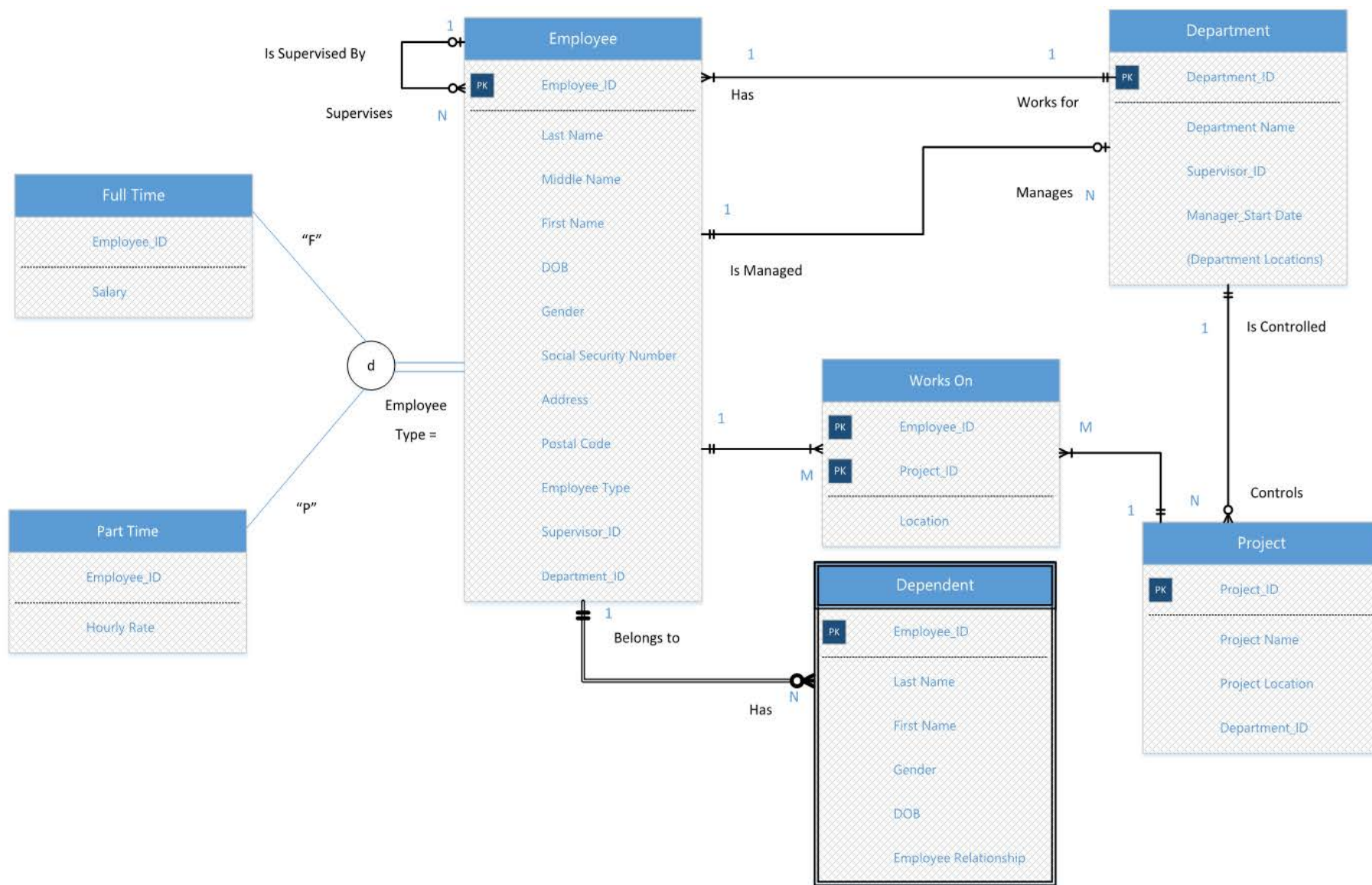
One employee may supervise many other employees.
One employee may be supervised by another employee.

Part time employee must be an employee.
Full time employee must be an employee.

Relationship Matrix

	Employee	Department	Project	Dependent	Department Location
Employee	<ul style="list-style-type: none"> Supervises Is Supervised 	<ul style="list-style-type: none"> Has Is Managed 	--	Belongs to	--
Department	<ul style="list-style-type: none"> Works for Manages 	--	Is Controlled	--	Has
Project	Works on	Controls	--	--	--
Dependent	Has	--	--	--	--
Part-Time Employee	Is	--	--	--	--
Full-Time Employee	Is	--	--	--	--

ER Diagram



Tables and Attributes

Employee

Employee-ID (PK)	EmployeeName	EmployeeAddress	EmployeeSSN	EmployeeDOB	Supervisor-ID	Department-ID (FK)	Employee Type
-------------------------	--------------	-----------------	-------------	-------------	---------------	---------------------------	---------------

Department

Department-ID(PK)	DepartmentName	Manager-ID (FK)	ManagerStartDate
--------------------------	----------------	------------------------	------------------

Project

Project-ID (PK)	ProjectName	Department-ID (FK)	ProjectLocation
------------------------	-------------	---------------------------	-----------------

Dependent

Employee-ID (FK)	FirstName	Sex	Birthday	Relationship
-------------------------	------------------	-----	----------	--------------

WorksOn

Employee-ID (FK)	Project-ID (FK)	WeeklyHours
-------------------------	------------------------	-------------

DepartmentLocation

Department-ID (FK)	Location (FK)	Phone
---------------------------	----------------------	-------

Full-Time

Employee-ID (PK)(FK)	Salary
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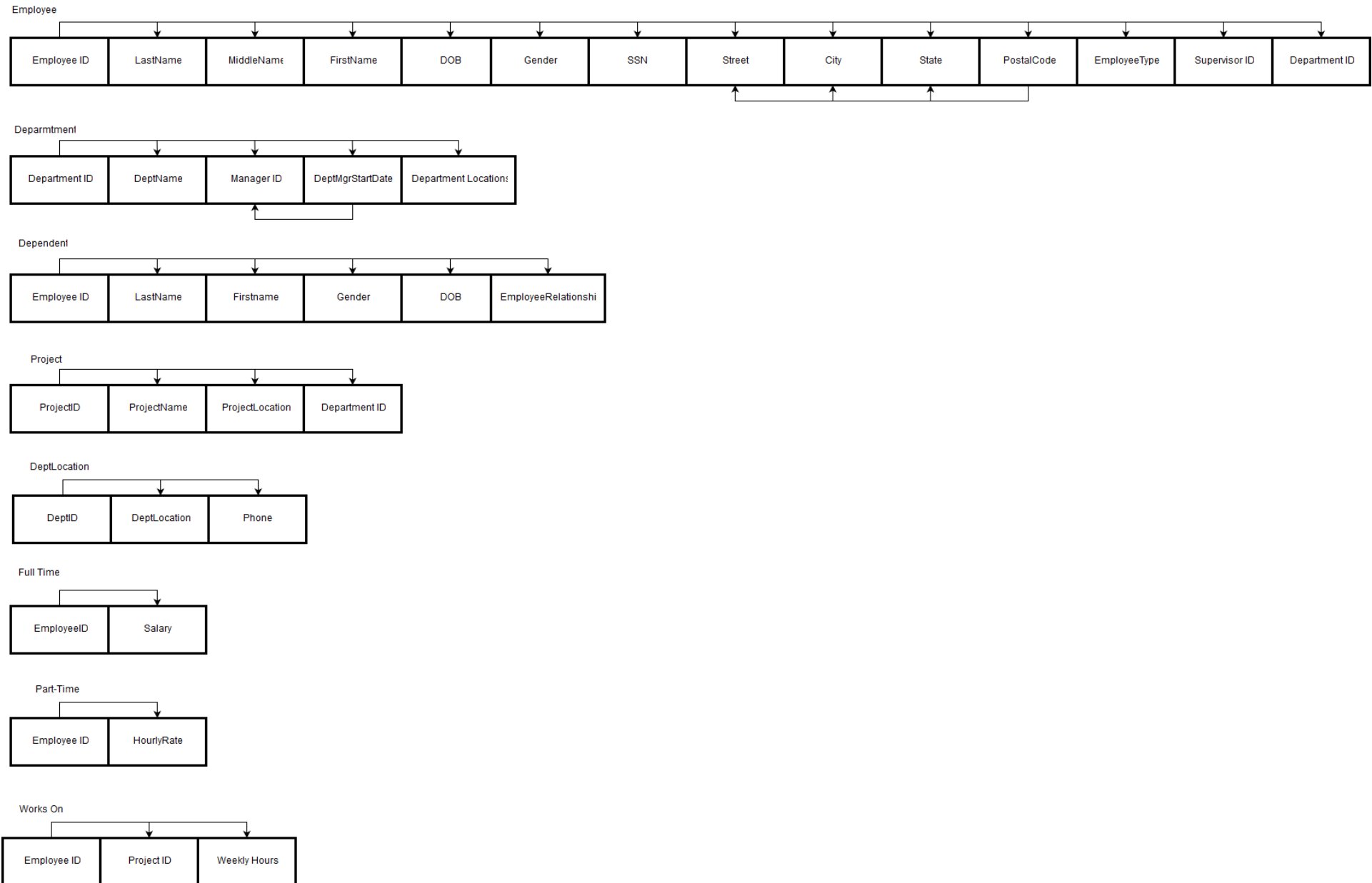
Part-Time

Employee-ID (PK)(FK)	HourlyRate
-----------------------------	------------

Referential Integrity

1. Employee.Department_ID -> Department.department_ID
2. Department.Manager_ID -> Employee.Employee_ID
3. Project.Department -> Department.Department_ID
4. Dependent.Employee_ID -> Employee.Employee_ID
5. Supervisor.Employee_ID -> Employee.Employee_ID
6. WorksOn.Employee_ID -> Employee.Employee_ID
7. WorksOn.Project_ID -> Project.Project_ID
8. DepartmentLocation.Department_ID -> Department.Department_ID
9. Full-Time.Employee_ID -> Employee.Employee_ID
10. Part-Time.Employee_ID -> Employee.Employee_ID

Functional Dependency Analysis



Relational Schema After Normalization

Table Name	1NF	2NF	3NF
Employee	Yes	Yes	No
Department	Yes	Yes	No
Dependent	Yes	Yes	Yes
Project	Yes	Yes	Yes
DeptLocation	Yes	Yes	Yes
Full-time	Yes	Yes	Yes
Part-time	Yes	Yes	Yes
WorksOn	Yes	Yes	Yes

Comment: Employee table is not in 3NF because it has transitive dependency. SupervisorID has transitive dependency that refers to EmployeeID. Department table is not in 3NF because it has transitive dependency. ManagerID has transitive dependency that refers to EmployeeID in Employee table.

SQL DDL (Database Creation Script):

```
DROP TABLE project_t CASCADE CONSTRAINTS;
DROP TABLE deptLoc_t CASCADE CONSTRAINTS;
DROP TABLE partTime_t CASCADE CONSTRAINTS;
DROP TABLE fullTime_t CASCADE CONSTRAINTS;
DROP TABLE dependent_t CASCADE CONSTRAINTS;
DROP TABLE worksOn_t CASCADE CONSTRAINTS;
DROP TABLE employee_t CASCADE CONSTRAINTS;
DROP TABLE dept_t CASCADE CONSTRAINTS;
```

```
CREATE TABLE dept_t(
dept_Id INTEGER NOT NULL,
deptName VARCHAR2(25) ,
manager_Id INTEGER,
managerStartDate DATE,
CONSTRAINT dept_PK PRIMARY KEY (dept_Id),
CONSTRAINT dept_ck CHECK (dept_Id between 0 and 50),
CONSTRAINT dept_uk UNIQUE (deptName)
);
```

```
CREATE TABLE employee_t(
employee_Id INTEGER NOT NULL,
firstName VARCHAR2(25) ,
middleInt VARCHAR2(5),
lastName VARCHAR2(20),
employee_SSN INTEGER,
birthDate DATE,
sex VARCHAR2(2),
address VARCHAR2(30),
city VARCHAR2(20),
state VARCHAR2(5),
postal_code INTEGER,
supervisor_Id INTEGER,
deptNo INTEGER,
empl_Type VARCHAR2(2),
CONSTRAINT employee_PK PRIMARY KEY (employee_Id),
CONSTRAINT employee_FK1 FOREIGN KEY (deptNo) REFERENCES dept_t(dept_Id),
CONSTRAINT employee_FK2 FOREIGN KEY (supervisor_Id) REFERENCES employee_t(employee_Id)
);
```

```
CREATE TABLE project_t(
project_Id INTEGER NOT NULL,
projectName VARCHAR2(20),
projectLocation VARCHAR2(20),
deptNo INTEGER,
CONSTRAINT project_PK PRIMARY KEY (project_Id),
CONSTRAINT project_FK1 FOREIGN KEY (deptNo) REFERENCES dept_t(dept_Id)
);
```

```
CREATE TABLE deptLoc_t(
deptNo INTEGER,
dept_location VARCHAR2(20),
phone INTEGER,
CONSTRAINT deptLoc_PK PRIMARY KEY (deptNo, dept_location),
CONSTRAINT deptLoc_FK1 FOREIGN KEY (deptNo) REFERENCES dept_t(dept_Id),
CONSTRAINT deptLoc_FK2 FOREIGN KEY (dept_location) REFERENCES project_t(projectLocation)
);
```

```
CREATE TABLE dependent_t(
employee_Id INTEGER NOT NULL,
dependentName VARCHAR2(25),
sex VARCHAR2(2),
birthDate DATE,
relationship VARCHAR2(25),
CONSTRAINT dependent_FK1 FOREIGN KEY (employee_Id) REFERENCES employee_t(employee_Id)
);
```

```
CREATE TABLE worksOn_t(
employee_Id INTEGER NOT NULL,
projectNo INTEGER,
hours NUMBER(8,2),
CONSTRAINT worksOn_PK PRIMARY KEY (employee_Id, projectNo),
CONSTRAINT worksOn_FK1 FOREIGN KEY (employee_Id) REFERENCES employee_t(employee_Id),
CONSTRAINT worksOn_FK2 FOREIGN KEY (projectNo) REFERENCES project_t(project_Id)
);
```

```
CREATE TABLE fullTime_t(
employee_Id INTEGER,
salary NUMBER(10,2),
CONSTRAINT fullTime_FK1 FOREIGN KEY (employee_Id) REFERENCES employee_t(employee_Id)
);
```

```
CREATE TABLE partTime_t(
employee_Id INTEGER,
hourly_Rate NUMBER(5,2),
CONSTRAINT partTime_FK1 FOREIGN KEY (employee_Id) REFERENCES employee_t(employee_Id)
);
```

```
ALTER TABLE dept_t
ADD CONSTRAINT dept_FK3 FOREIGN KEY (manager_Id) REFERENCES employee_t(employee_Id);
```

Disable Constraints

```
ALTER TABLE dept_t
DISABLE CONSTRAINT dept_fk3 cascade;
```

```
ALTER TABLE employee_t
DISABLE CONSTRAINT employee_fk2 cascade;
```

Department Insert Statements

```
INSERT INTO dept_t (dept_Id, deptName, manager_Id, managerStartDate)
VALUES (1, 'Administrative', 53, '19-JUN-92');
```

```
INSERT INTO dept_t (dept_Id, deptName, manager_Id, managerStartDate)
VALUES (2, 'Accounting', 82, '05-OCT-94');
```

```
INSERT INTO dept_t (dept_Id, deptName, manager_Id, managerStartDate)
VALUES (3, 'Creative', 86, '22-MAY-99');
```

```
INSERT INTO dept_t (dept_Id, deptName, manager_Id, managerStartDate)
VALUES (4, 'Marketing', 10, '01-JAN-90');
```

```
INSERT INTO dept_t (dept_Id, deptName, manager_Id, managerStartDate)
VALUES (5, 'Branding', 90, '10-NOV-99');
```

Employee Insert Statements

```
INSERT INTO employee_t (employee_Id, firstName, middleInt, lastName, employee_SSN, birthDate, sex,
address, city, state, postal_code, supervisor_Id, deptNo, empl_Type)
VALUES (10, 'John', 'B', 'Wong', 741258963, '09-JAN-75', 'M', '123 1st St.', 'Las Vegas', 'NV', 30000, 22, 4, 'FT');
```

```
INSERT INTO employee_t (employee_Id, firstName, middleInt, lastName, employee_SSN, birthDate, sex,
address, city, state, postal_code, supervisor_Id, deptNo, empl_Type)
VALUES (22, 'Josh', 'T', 'Thomas', 333445555, '08-DEC-76', 'M', '52 Dell Ave', 'Los Angeles', 'CA', 90031, NULL,
1, 'FT');
```

```
INSERT INTO employee_t (employee_Id, firstName, middleInt, lastName, employee_SSN, birthDate, sex,
address, city, state, postal_code, supervisor_Id, deptNo, empl_Type)
VALUES (53, 'Alison', 'B', 'Rojas', 123456789, '19-JUL-84', 'F', '8596 West Lincoln Blvd', 'Los Angeles', 'CA',
92513, 22, 1, 'FT');
```

```
INSERT INTO employee_t (employee_Id, firstName, middleInt, lastName, employee_SSN, birthDate, sex,
address, city, state, postal_code, supervisor_Id, deptNo, empl_Type)
VALUES (61, 'Judy', 'S', 'Wallace', 987654321, '20-JUN-82', 'F', '123 1st St.', 'Las Vegas', 'NV', 30000, 82, 2, 'PT');
```

```
INSERT INTO employee_t (employee_Id, firstName, middleInt, lastName, employee_SSN, birthDate, sex,
address, city, state, postal_code, supervisor_Id, deptNo, empl_Type)
VALUES (82, 'Teddy', 'K', 'Kim', 222335566, '15-SEP-72', 'M', '1258 Flamingo St.', 'Las Vegas', 'NV', 30000, 22, 2, 'FT');
```

```
INSERT INTO employee_t (employee_Id, firstName, middleInt, lastName, employee_SSN, birthDate, sex,
address, city, state, postal_code, supervisor_Id, deptNo, empl_Type)
VALUES (86, 'Jonathan', 'A', 'Doug', 321486200, '31-JUL-62', 'M', '450 South Grand Ave', 'Los Angeles', 'CA',
90031, 22, 3, 'FT');
```

```
INSERT INTO employee_t (employee_Id, firstName, middleInt, lastName, employee_SSN, birthDate, sex,
address, city, state, postal_code, supervisor_Id, deptNo, empl_Type)
VALUES (90, 'Susie', 'V', 'Hardy', 654987321, '29-MAR-70', 'F', '450 South Grand Ave', 'Los Angeles', 'CA',
90031, 22, 5, 'FT');
```

```
INSERT INTO employee_t (employee_Id, firstName, middleInt, lastName, employee_SSN, birthDate, sex,
address, city, state, postal_code, supervisor_Id, deptNo, empl_Type)
VALUES (99, 'James', 'E', 'Borg', 888665555, '10-NOV-82', 'M', '103 Bally Ave', 'Las Vegas', 'NV', 30000, 10, 4, 'PT');
```

Department Location Insert Statements

```
INSERT INTO deptLoc_t (deptNo, dept_location, phone)
VALUES (1, 'Los Angeles', 2132235236);
```

```
INSERT INTO deptLoc_t (deptNo, dept_location, phone)
VALUES (2, 'Las Vegas', 5245332869);
```

```
INSERT INTO deptLoc_t (deptNo, dept_location, phone)
VALUES (3, 'Los Angeles', 2132235236);
```

```
INSERT INTO deptLoc_t (deptNo, dept_location, phone)
VALUES (4, 'Las Vegas', 5245332869);
```

```
INSERT INTO deptLoc_t (deptNo, dept_location, phone)
VALUES (5, 'Los Angeles', 2132235236);
```

Project Insert Statements

```
INSERT INTO project_t (project_Id, projectName, projectLocation, deptNo)
VALUES (6, 'ProjectA', 'Los Angeles', 3);
```

```
INSERT INTO project_t (project_Id, projectName, projectLocation, deptNo)
VALUES (8, 'ProjectC', 'Los Angeles', 5);
```

```
INSERT INTO project_t (project_Id, projectName, projectLocation, deptNo)
VALUES (10, 'PlanY', 'Los Angeles', 1);
```

```
INSERT INTO project_t (project_Id, projectName, projectLocation, deptNo)
VALUES (20, 'BillingB', 'Las Vegas', 2);
```

```
INSERT INTO project_t (project_Id, projectName, projectLocation, deptNo)
VALUES (30, 'MarketX', 'Las Vegas', 4);
```

Dependent Insert Statements

```
INSERT INTO dependent_t (employee_Id, dependentName, sex, birthDate, relationship)
VALUES (22, 'Sue', 'F', '05-FEB-90', 'Daughter');
```

```
INSERT INTO dependent_t (employee_Id, dependentName, sex, birthDate, relationship)
VALUES (22, 'Terry', 'M', '25-NOV-94', 'Son');
```

```
INSERT INTO dependent_t (employee_Id, dependentName, sex, birthDate, relationship)
VALUES (22, 'Joy', 'F', '03-MAY-74', 'Spouse');
```

```
INSERT INTO dependent_t (employee_Id, dependentName, sex, birthDate, relationship)
VALUES (53, 'Mike', 'M', '01-JAN-15', 'Son');
```

```
INSERT INTO dependent_t (employee_Id, dependentName, sex, birthDate, relationship)
VALUES (99, 'Aex', 'F', '31-DEC-10', 'Daughter');
```

```
INSERT INTO dependent_t (employee_Id, dependentName, sex, birthDate, relationship)
VALUES (99, 'Elizabeth', 'F', '05-May-84', 'Spouse');
```

WorksOn Insert Statements

```
INSERT INTO worksOn_t (employee_Id, projectNo, hours)
VALUES (99, 30, 18.5);
```

```
INSERT INTO worksOn_t (employee_Id, projectNo, hours)
VALUES (99, 20, 5.5);
```

```
INSERT INTO worksOn_t (employee_Id, projectNo, hours)
VALUES (90, 8, 40);
```

```
INSERT INTO worksOn_t (employee_Id, projectNo, hours)
VALUES (86, 6, 54);
```

```
INSERT INTO worksOn_t (employee_Id, projectNo, hours)
VALUES (61, 20, 5);
```

```
INSERT INTO worksOn_t (employee_Id, projectNo, hours)
VALUES (82, 20, 10);
```

```
INSERT INTO worksOn_t (employee_Id, projectNo, hours)
VALUES (82, 30, 15);
```

```
INSERT INTO worksOn_t (employee_Id, projectNo, hours)
VALUES (22, 10, null);
```

```
INSERT INTO worksOn_t (employee_Id, projectNo, hours)
VALUES (53, 10, 68.75);
```

```
INSERT INTO worksOn_t (employee_Id, projectNo, hours)
VALUES (10, 30, 40);
```

Full-Time Insert Statements

```
INSERT INTO fullTime_t (employee_Id, salary)
VALUES (10, 5000);
```

```
INSERT INTO fullTime_t (employee_Id, salary)
VALUES (22, 14000);
```

```
INSERT INTO fullTime_t (employee_Id, salary)
VALUES (53, 4750);
```

```
INSERT INTO fullTime_t (employee_Id, salary)
VALUES (82, 6000);
```

```
INSERT INTO fullTime_t (employee_Id, salary)
VALUES (86, 7500);
```

```
INSERT INTO fullTime_t (employee_Id, salary)
VALUES (90, 4800);
```

Part-Time Insert Statements

```
INSERT INTO partTime_t (employee_Id, hourly_Rate)
VALUES (61, 22.50);
```

```
INSERT INTO partTime_t (employee_Id, hourly_Rate)
VALUES (99, 18.00);
```

Enable Constraints

```
ALTER TABLE dept_t
ENABLE CONSTRAINT dept_fk3;
```

```
ALTER TABLE employee_t
ENABLE CONSTRAINT employee_fk2;
```

```
COMMIT;
```

Database Structure

DESC dept_t;

Name	Null?	Type
DEPT_ID	NOT NULL	NUMBER(38)
DEPTNAME		VARCHAR2(25)
MANAGER_ID		NUMBER(38)
MANAGERSTARTDATE		DATE

DESC employee_t;

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER(38)
FIRSTNAME		VARCHAR2(25)
MIDDLEINT		VARCHAR2(5)
LASTNAME		VARCHAR2(20)
EMPLOYEE_SSN		NUMBER(38)
BIRTHDATE		DATE
SEX		VARCHAR2(2)
ADDRESS		VARCHAR2(30)
CITY		VARCHAR2(20)
STATE		VARCHAR2(5)
POSTAL_CODE		NUMBER(38)
SUPERVISOR_ID		NUMBER(38)
DEPTNO		NUMBER(38)
EMPL_TYPE		VARCHAR2(2)

DESC project_t;

Name	Null?	Type
PROJECT_ID	NOT NULL	NUMBER(38)
PROJECTNAME		VARCHAR2(20)
PROJECTLOCATION		VARCHAR2(20)
DEPTNO		NUMBER(38)

DESC worksOn_t;

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER(38)
PROJECTNO	NOT NULL	NUMBER(38)
HOURS		NUMBER(8,2)

DESC dependent_t;

Name	Null?	Type
EMPLOYEE_ID	NOT NULL	NUMBER(38)
DEPENDENTNAME		VARCHAR2(25)
SEX		VARCHAR2(2)
BIRTHDATE		DATE
RELATIONSHIP		VARCHAR2(25)

DESC deptLoc_t;

Name	Null?	Type
DEPTNO		NUMBER(38)
DEPT_LOCATION		VARCHAR2(20)
PHONE		NUMBER(38)

DESC fullTime_t;

Name	Null?	Type
EMPLOYEE_ID		NUMBER(38)
SALARY		NUMBER(10,2)

DESC partTime_t;

Name	Null?	Type
EMPLOYEE_ID		NUMBER(38)
HOURLY_RATE		NUMBER(5,2)

Database Entity Instances

*SELECT * FROM dept_t;*

DEPT_ID	DEPTNAME	MANAGER_ID	MANAGERSTARTDATE
1	Administrative	53	19-JUN-92
2	Accounting	82	05-OCT-94
3	Creative	86	22-MAY-99
4	Marketing	10	01-JAN-90
5	Branding	90	10-NOV-99

*SELECT * FROM employee_t;*

EMPLOYEE_ID	FIRSTNAME	MIDDLEINT	LASTNAME	EMPLOYEE_SSN	BIRTHDATE	SEX	ADDRESS	CITY	STATE	POSTAL_CODE	SUPERVISOR_ID	DEPTNO	EMPL_T
10	John	B	Wong	741258963	09-JAN-75	M	123 1st St.	Las Vegas	NV	30000	22	4	FT
22	Josh	T	Thomas	333445555	08-DEC-76	M	52 Dell Ave	Los Angeles	CA	90031		1	FT
53	Alison	B	Rojas	123456789	19-JUL-84	F	8596 West Lincoln Blvd	Los Angeles	CA	92513	22	1	FT
61	Judy	S	Wallace	987654321	20-JUN-82	F	123 1st St.	Las Vegas	NV	30000	82	2	PT
82	Teddy	K	Kim	222335566	15-SEP-72	M	1258 Flamingo St.	Las Vegas	NV	30000	22	2	FT
86	Jonathan	A	Doug	321486200	31-JUL-62	M	450 South Grand Ave	Los Angeles	CA	90031	22	3	FT
90	Susie	V	Hardy	654987321	29-MAR-70	F	450 South Grand Ave	Los Angeles	CA	90031	22	5	FT
99	James	E	Borg	888665555	10-NOV-82	M	103 Bally Ave	Las Vegas	NV	30000	10	4	PT

*SELECT * FROM Project_t;*

PROJECT_ID	PROJECTNAME	PROJECTLOCATION	DEPTNO
6	ProjectA	Los Angeles	3
8	ProjectC	Los Angeles	5
10	PlanY	Los Angeles	1
20	BillingB	Las Vegas	2
30	MarketX	Las Vegas	4

*SELECT * FROM dependent_t;*

EMPLOYEE_ID	DEPENDENTNAME	SEX	BIRTHDATE	RELATIONSHIP
22	Sue	F	05-FEB-90	Daughter
22	Terry	M	25-NOV-94	Son
22	Joy	F	03-MAY-74	Spouse
53	Mike	M	01-JAN-15	Son
99	Aex	F	31-DEC-10	Daughter
99	Elizabeth	F	05-MAY-84	Spouse

*SELECT * FROM WorksOn;*

EMPLOYEE_ID	PROJECTNO	HOURS
99	30	18.5
99	20	5.5
90	8	40
86	6	54
61	20	5
82	20	10
82	30	15
22	10	
53	10	68.75
10	30	40

*SELECT * FROM deptLoc_t;*

DEPTNO	DEPT_LOCATION	PHONE
1	Los Angeles	2132235236
2	Las Vegas	5245332869
3	Los Angeles	2132235236
4	Las Vegas	5245332869
5	Los Angeles	2132235236

*SELECT * FROM fullTime_t;*

EMPLOYEE_ID	SALARY
10	5000
22	14000
53	4750
82	6000
86	7500
90	4800

*SELECT * FROM partTime_t;*

EMPLOYEE_ID	HOURLY_RATE
61	22.5
99	18

View

View of Dependent Name, Sex, and Relationship.

Enter SQL, PL/SQL and SQL*Plus statements.

```
CREATE VIEW dependentVU
AS SELECT dependentName, sex, relationship
FROM dependent_t
```

Execute Load Script Save Script Cancel

View created.

*SELECT * FROM dependentVU;*

DEPENDENTNAME	SEX	RELATIONSHIP
Sue	F	Daughter
Terry	M	Son
Joy	F	Spouse
Mike	M	Son
Aex	F	Daughter
Elizabeth	F	Spouse

6 rows selected.

Delete Statement

Delete the Department Location that contains "Las Vegas."

Enter SQL, PL/SQL and SQL*Plus statements.

```
DELETE FROM deptLoc_t
WHERE dept_location = 'Las Vegas'
```

Execute Load Script Save Script Cancel

2 rows deleted.

*SELECT * FROM deptLoc_t;*

DEPTNO	DEPT_LOCATION	PHONE
1	Los Angeles	2132235236
3	Los Angeles	2132235236
5	Los Angeles	2132235236

Update Statement

Give a 5% raise to Full-Time Employees (Due to promotion).

Enter SQL, PL/SQL and SQL*Plus statements.

```
UPDATE fullTime_t
SET salary = salary * 1.05
```

Execute Load Script Save Script Cancel

6 rows updated.

*SELECT * FROM fullTime_t;*

EMPLOYEE_ID	SALARY
10	5250
22	14700
53	4987.5
82	6300
86	7875
90	5040

6 rows selected.

Queries

1. Get Employees who work part-time only.

```
SELECT employee_SSN, firstName, middleInt, lastName, empl_Type
FROM employee_t
WHERE Empl_Type = 'PT';
```

EMPLOYEE_SSN	FIRSTNAME	MIDDLEINT	LASTNAME	EMPL_T
987654321	Judy	S	Wallace	PT
888665555	James	E	Borg	PT

2. How many employees are working on more than 1 project?

```
SELECT projectNo, count(projectNo)Number_of_Employees
FROM worksON_t
GROUP BY projectNo
HAVING count(projectNo) > 1;
```

PROJECTNO	NUMBER_OF_EMPLOYEES
30	3
20	3
10	2

3. How many employees have more than 1 dependent?

```
SELECT employee_t.employee_Id, COUNT(dependentName)
FROM employee_t, dependent_t
WHERE employee_t.employee_Id = dependent_t.employee_Id
GROUP BY employee_t.employee_Id
HAVING COUNT(dependentName) >1;
```

EMPLOYEE_ID	COUNT(DEPENDENTNAME)
99	2
22	3

4. Select the names of full-time employees

```
SELECT employee_Id, firstName, lastName
FROM employee_t
WHERE employee_Id IN
      (SELECT employee_ID
       FROM fullTime_t);
```

EMPLOYEE_ID	FIRSTNAME	LASTNAME
10	John	Wong
22	Josh	Thomas
53	Allison	Rojas
82	Teddy	Kim
86	Jonathan	Doug
90	Susie	Hardy

6 rows selected.