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CSE 572 Lab_3

CREATE.sql

/*

- 1. Log on to orafarm.cse.csusb.edu using SQL Developer.
- 2. Use the SQL Developer to create the four tables EMP, DEPT, PROJ, EMP_PROJ with the appropriate

constraints except FOREIGN KEY constraints. For filename, use CREATE.sql accordingly.

- 3. Import data from the csv files to EMP, DEPT, and PROJ tables.
- 4. Check that all data for EMP, DEPT, and PROJ tables has been imported.

*/

CREATE TABLE EMP

```
(empNo number(4) PRIMARY KEY,
fname varchar2(50) NOT NULL,
lname varchar2(50) NOT NULL,
address varchar2(50),
sex Char(1),
salary number(6) CHECK(SALARY > 12000),
position varchar2(50),
deptNo number)
```

-- Testing/Fix Mistakes

select * FROM EMP

DESCRIBE EMP

DROP TABLE EMP

CREATE TABLE DEPT

(deptNumber number(2) PRIMARY KEY, deptName varchar2(50) NOT NULL, Mgr number(4)NOT NULL)

--Testing/Fix Mistakes

select * FROM DEPT

DESCRIBE DEPT

DROP TABLE DEPT

CREATE TABLE PROJ

(projNumber number(2) PRIMARY KEY, projName varchar2(50), deptNum number(2))

--Testing/Fix Mistakes select * FROM PROJ DESCRIBE PROJ

DROP TABLE PROJ

CREATE TABLE EMP_PROJ

(empNo number(4),

```
projNo number(2),
hoursWorked number(3,1),
CONSTRAINT PK_EmpProj PRIMARY KEY (empNo,projNo))
```

--Testing/Fix Mistakes

select * FROM EMP_PROJ

DESCRIBE EMP_PROJ

DROP TABLE EMP_PROJ

ALTER.sql

/*

5. In SQL Developer add the FOREIGN KEY constraints for each of the EMP, DEPT, PROJ and EMP_PROJ tables

using Alter statement. For filename, use ALTER.sql accordingly.

*/

ALTER TABLE EMP

ADD FOREIGN KEY(deptNo)

REFERENCES DEPT(deptNumber)

ALTER TABLE DEPT

ADD FOREIGN KEY(Mgr)

REFERENCES EMP(empNo)

ALTER TABLE PROJ ADD FOREIGN KEY(deptNum) REFERENCES DEPT(deptNumber) ALTER TABLE EMP_PROJ ADD FOREIGN KEY(empNo) REFERENCES EMP(empNo) /* 6. Use the substitution & method of INSERT command to populate EMP PROJ table. 7. Check that all data for EMP_PROJ table has been entered. */ INSERT INTO EMP PROJ VALUES(&empNo, &projNo, &hoursWorked) /* 8. Use the alter table to add a new column named email in the employees table. */ ALTER TABLE EMP ADD email varchar2(255);

/*

9. Try to execute the following insert statement and explain what is happening.

INSERT INTO EMPLOYEES VALUES (1172, 'joe', 'Calvert', '672 White Pine, Austin, TX', 'X', 10000, 10);

*/

INSERT INTO EMPLOYESS VALUES (1172, 'joe', 'Calvert', '672 White Pine, Austin, TX', 'X', 10000, 10);



What is Happening:

The statement is attempting to insert the values within the parenthesis into the EMPLOYEES table.

Within the parathesis, string values are enclosed within " and number values are not, but ' ' is incorrect and should be ".

Between each comma is a value to be inserted into a designated column (left to right),

but there is only 7 values and need to be 9 to equal the number of columns within the EMPLOYEES table.

The issue with this statement is that there is an error at command line: 47 column: 37, where there is an invalid character.

The cause is due to the identifier name starting with as ASCII character (' ') and not a letter or a number.

Also the table is named EMP and not EMPLOYEES



DESCRIBE EMP

/*

Name Null? Type

EMPNO NOT NULL NUMBER(4)

FNAME NOT NULL VARCHAR2(50)

LNAME NOT NULL VARCHAR2(50)

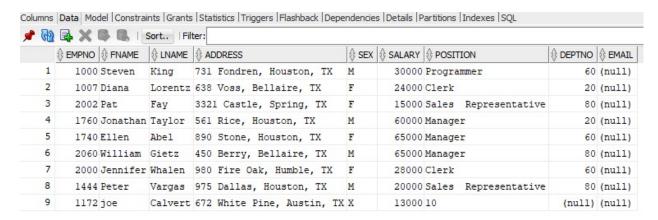
ADDRESS VARCHAR2(50)

```
CHAR(1)
SEX
SALARY
               NUMBER(6)
POSITION
               VARCHAR2(50)
DEPTNO
              NUMBER
EMAIL
             VARCHAR2(255)
*/
/*
10. Please necessary corrections on the insert statement above.
*/
SELECT * FROM EMP
INSERT INTO EMP VALUES (1172, 'joe', 'Calvert', '672 White Pine, Austin, TX', 'X', 13000,
10, NULL, NULL);
CORRECTIONS:
-Salary has to be greater than 12000 (it was 10000)
-Changed ' ' into "
-Added 2 extra column values to equal the required amount of 9
-Changed EMPLOYEES into EMP to match naming scheme
```

*/

TABLES

EMP



DEPT



PROJ

		₱ PROJNAME	♦ DEPTNUM
1	10	Product X	20
2	20	Product Y	20
3	30	Computerization	60
4	40	Product Z	80
5	50	Mobile Apps	60

EMP_PROJ

	⊕ EMPNO	₱ROJNO	♦ HOURSWORKED
1	1000	30	32.5
2	1000	50	7.5
3	2002	10	40
4	1444	20	20
5	1760	10	5
6	1760	20	10
7	1740	50	15
8	2060	40	12