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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)

SEX CHAR(1)
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 EMPLOYEEES into EMP to match naming scheme

*/

TABLES

EMP

Columns

Data

Model

Constraints

Grants

Statistics

Triggers

Flashback


Dependencies


Details


Partitions


Indexes


SQL














Sort..

Filter:

	EMPNO	FNAME	LNAME	ADDRESS	SEX	SALARY	POSITION	DEPTNO	EMAIL
1	1000	Steven	King	731 Fondren, Houston, TX	M	30000	Programmer	60	(null)
2	1007	Diana	Lorentz	638 Voss, Bellaire, TX	F	24000	Clerk	20	(null)
3	2002	Pat	Fay	3321 Castle, Spring, TX	F	15000	Sales Representative	80	(null)
4	1760	Jonathan	Taylor	561 Rice, Houston, TX	M	60000	Manager	20	(null)
5	1740	Ellen	Abel	890 Stone, Houston, TX	F	65000	Manager	60	(null)
6	2060	William	Gietz	450 Berry, Bellaire, TX	M	65000	Manager	80	(null)
7	2000	Jennifer	Whalen	980 Fire Oak, Humble, TX	F	28000	Clerk	60	(null)
8	1444	Peter	Vargas	975 Dallas, Houston, TX	M	20000	Sales Representative	80	(null)
9	1172	joe	Calvert	672 White Pine, Austin, TX	X	13000	10	(null)	(null)

DEPT

	DEPTNUMBER	DEPTNAME	MGR
1	20	Marketing	1760
2	60	IT	1740
3	80	Sales	2060

PROJ

	PROJNUMBER	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	PROJNO	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

