Jesus Medina : 005172852

Lab 4

create table emp(

empno number(4) not null

CONSTRAINT emp\_empno\_PK PRIMARY KEY,

fname varchar2(30) not null,

lname varchar2(30) not null,

address varchar2(30) not null,

sex char(1) not null,

salary number(15) not null,

pos varchar2(30) not null,

deptno number(2) not null

);

Table EMP created.

describe emp;

Name Null? Type

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EMPNO NOT NULL NUMBER(4)

FNAME NOT NULL VARCHAR2(30)

LNAME NOT NULL VARCHAR2(30)

ADDRESS NOT NULL VARCHAR2(30)

SEX NOT NULL CHAR(1)

SALARY NOT NULL NUMBER(15)

POS NOT NULL VARCHAR2(30)

DEPTNO NOT NULL NUMBER(2)

insert into emp(empno, fname, lname, address, sex, salary, pos, deptno) Values

(1007, 'Diana', 'Lorentz', '638 Voss, Bellaire, TX', 'F', 24000, 'Clerk', 20);

insert into emp(empno, fname, lname, address, sex, salary, pos, deptno) Values

(2002, 'Pat', 'Fay', '3321 Castle, Spring, TX', 'F', 15000, 'Sales Representative', 80);

insert into emp(empno, fname, lname, address, sex, salary, pos, deptno) Values

(1760, 'Johnathan', 'Taylor', '561 Rice, Houston, TX', 'M', 60000, 'Manager', 20);

insert into emp(empno, fname, lname, address, sex, salary, pos, deptno) Values

(1740, 'Ellen', 'Abel', '890 Stone, Houston, TX', 'F', 65000, 'Manager', 60);

insert into emp(empno, fname, lname, address, sex, salary, pos, deptno) Values

(2060, 'William', 'Gietz', '450 Berry, Bellaire, TX', 'M', 65000, 'Manager', 80);

insert into emp(empno, fname, lname, address, sex, salary, pos, deptno) Values

(2000, 'Jennifer', 'Whalen', '980 Fire Oak, Humble, TX', 'F', 28000, 'Clerk', 60);

insert into emp(empno, fname, lname, address, sex, salary, pos, deptno) Values

(1444, 'Peter', 'Vargas', '975 Dallas, Houston, TX', 'M', 20000, 'Sales Representative', 80);

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

select \* from emp;

EMPNO FNAME LNAME ADDRESS S SALARY POS DEPTNO

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1007 Diana Lorentz 638 Voss, Bellaire, TX F 24000 Clerk 20

2002 Pat Fay 3321 Castle, Spring, TX F 15000 Sales Representative 80

1760 Johnathan Taylor 561 Rice, Houston, TX M 60000 Manager 20

1740 Ellen Abel 890 Stone, Houston, TX F 65000 Manager 60

2060 William Gietz 450 Berry, Bellaire, TX M 65000 Manager 80

2000 Jennifer Whalen 980 Fire Oak, Humble, TX F 28000 Clerk 60

1444 Peter Vargas 975 Dallas, Houston, TX M 20000 Sales Representative 80

7 rows selected.

create table dept(

deptnumber number(2) not null

CONSTRAINT dept\_deptnumber\_UK PRIMARY KEY,

deptname varchar2(30) not null,

mgr number(5) not null

);

Table DEPT created.

describe dept;

Name Null? Type

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DEPTNUMBER NOT NULL NUMBER(2)

DEPTNAME NOT NULL VARCHAR2(30)

MGR NOT NULL NUMBER(5)

insert into dept(deptnumber, deptname, mgr) values

(20, 'Marketing', 1760);

insert into dept(deptnumber, deptname, mgr) values

(60, 'IT', 1740);

insert into dept(deptnumber, deptname, mgr) values

(80, 'Sales', 2060);

1 row inserted.

1 row inserted.

1 row inserted.

select \* from dept;

DEPTNUMBER DEPTNAME MGR

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20 Marketing 1760

60 IT 1740

80 Sales 2060

create table proj(

projnumber number(2) not null

CONSTRAINT proj\_projnumber\_PK PRIMARY KEY,

projname varchar2(30) not null,

deptnum number(2) not null

);

Table PROJ created.

describe proj;

Name Null? Type

---------- -------- ------------

PROJNUMBER NOT NULL NUMBER(2)

PROJNAME NOT NULL VARCHAR2(30)

DEPTNUM NOT NULL NUMBER(2)

insert into proj(projnumber, projname, deptnum) values

(10, 'Product X', 20);

insert into proj(projnumber, projname, deptnum) values

(20, 'Product Y', 20);

insert into proj(projnumber, projname, deptnum) values

(30, 'Computerization', 60);

insert into proj(projnumber, projname, deptnum) values

(40, 'Product Z', 80);

insert into proj(projnumber, projname, deptnum) values

(50, 'Mobile Apps', 60);

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

select \* from proj;

PROJNUMBER PROJNAME DEPTNUM

---------- ------------------------------ ----------

10 Product X 20

20 Product Y 20

30 Computerization 60

40 Product Z 80

50 Mobile Apps 60

create table emp\_proj(

empno number(4) not null,

projno number(2) not null,

hoursworked number(3,1) not null,

CONSTRAINT emp\_proj\_empno\_projno\_PK PRIMARY KEY (empno, projno)

);

Table EMP\_PROJ created.

describe emp\_proj;

Name Null? Type

----------- -------- -----------

EMPNO NOT NULL NUMBER(4)

PROJNO NOT NULL NUMBER(2)

HOURSWORKED NOT NULL NUMBER(3,1)

insert into emp\_proj(empno, projno, hoursworked) values

(1000, 30, 32.5);

insert into emp\_proj(empno, projno, hoursworked) values

(1000, 50, 7.5);

insert into emp\_proj(empno, projno, hoursworked) values

(2002, 10, 40.0);

insert into emp\_proj(empno, projno, hoursworked) values

(1444, 20, 20.0);

insert into emp\_proj(empno, projno, hoursworked) values

(1760, 10, 5.0);

insert into emp\_proj(empno, projno, hoursworked) values

(1760, 20, 10.0);

insert into emp\_proj(empno, projno, hoursworked) values

(1740, 50, 15.0);

insert into emp\_proj(empno, projno, hoursworked) values

(2060, 40, 12.0);

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

1 row inserted.

select \* from emp\_proj;

EMPNO PROJNO HOURSWORKED

---------- ---------- -----------

1000 30 32.5

1000 50 7.5

2002 10 40

1444 20 20

1760 10 5

1760 20 10

1740 50 15

2060 40 12

8 rows selected.

alter table emp

add constraint emp\_deptno\_fk foreign key (deptno) references dept(deptnumber);

alter table proj

add constraint proj\_deptnum\_fk foreign key (deptnum) references dept(deptnumber);

alter table dept

add constraint dept\_mgr\_fk foreign key (mgr) references emp(empno);

alter table emp\_proj

add constraint emp\_proj\_empno\_fk foreign key (empno) references emp(empno);

alter table emp\_proj

add constraint emp\_proj\_projno\_fk foreign key (projno) references proj(projnumber);

Table EMP altered.

Table PROJ altered.

Table DEPT altered.

Error starting at line : 107 in command -

alter table emp\_proj

add constraint emp\_proj\_empno\_fk foreign key (empno) references emp(empno)

Error report -

ORA-02298: cannot validate (JMEDINA.EMP\_PROJ\_EMPNO\_FK) - parent keys not found

02298. 00000 - "cannot validate (%s.%s) - parent keys not found"

\*Cause: an alter table validating constraint failed because the table has

child records.

\*Action: Obvious

Table EMP\_PROJ altered.

update emp\_proj set empno = 1007 where empno = 1000;

2 rows updated.

alter table emp\_proj

add constraint emp\_proj\_empno\_fk foreign key (empno) references emp(empno);

Table EMP\_PROJ altered.

insert into emp\_proj values ('&empno', '&projno', '&hoursworked');

old:insert into emp\_proj values ('&empno', '&projno', '&hoursworked')

1 row inserted.

select \* from emp\_proj;

EMPNO PROJNO HOURSWORKED

---------- ---------- -----------

1000 30 32.5

1000 50 7.5

2002 10 40

1444 20 20

1760 10 5

1760 20 10

1740 50 15

2060 40 12

1740 30 35.5

9 rows selected.

alter table emp

add email VARCHAR2(50);

Table EMP altered.

insert into emp values (1172, 'joe', 'Calvert', '672 White Pine, Austin, TX', 'X', 10000, 10);

did not work because we did not declare which values we will be inserting, therefore it assumes we will be inserting values for all columns.

Error starting at line : 119 in command -

insert into emp values (1172, 'joe', 'Calvert', '672 White Pine, Austin, TX', 'X', 10000, 10)

Error at Command Line : 119 Column : 13

Error report -

SQL Error: ORA-00947: not enough values

00947. 00000 - "not enough values"

\*Cause:

\*Action:

insert into emp(empno, fname, lname, address, sex, salary, pos, deptno) values

(1172, 'joe', 'Calvert', '672 White Pine, Austin, TX', 'X', 10000, 'UNKNOWN', 20);

1 row inserted.

select \* from emp;

EMPNO FNAME LNAME ADDRESS S SALARY POS DEPTNO EMAIL

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1007 Diana Lorentz 638 Voss, Bellaire, TX F 24000 Clerk 20

2002 Pat Fay 3321 Castle, Spring, TX F 15000 Sales Representative 80

1760 Johnathan Taylor 561 Rice, Houston, TX M 60000 Manager 20

1740 Ellen Abel 890 Stone, Houston, TX F 65000 Manager 60

2060 William Gietz 450 Berry, Bellaire, TX M 65000 Manager 80

2000 Jennifer Whalen 980 Fire Oak, Humble, TX F 28000 Clerk 60

1444 Peter Vargas 975 Dallas, Houston, TX M 20000 Sales Representative 80

1172 joe Calvert 672 White Pine, Austin, TX X 10000 UNKNOWN 20

8 rows selected.