**UCS1412 – Database Lab**

**Assignment – 7**

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SQL> REM 1. The date of arrival should be always later than or on the same date of departure.

SQL>

SQL> create or replace trigger arr\_dept\_sk

2 before insert or update on fl\_schedule

3 for each row

4 when(new.departs>new.arrives)

5 begin

6 RAISE\_APPLICATION\_ERROR(NUM=>-20007,msg=>'Invalid arrival date,arrival date must be greater than depature date');

7 end;

8 /

Trigger created.

SQL> INSERT INTO fl\_schedule VALUES ('9E-3851','13-apr-2005',0710,'12-apr-2005',0800,120.40);

INSERT INTO fl\_schedule VALUES ('9E-3851','13-apr-2005',0710,'12-apr-2005',0800,120.40)

\*

ERROR at line 1:

ORA-20007: Invalid arrival date,arrival date must be greater than depature date

ORA-06512: at "SYSTEM.ARR\_DEPT\_SK", line 2

ORA-04088: error during execution of trigger 'SYSTEM.ARR\_DEPT\_SK'

SQL> REM 2. Flight number CX­7520 is scheduled only on Tuesday, Friday and Sunday.

SQL>

SQL> delete from fl\_schedule where flno='CX-7520';

3 rows deleted.

SQL>

SQL> create or replace trigger tfs\_sk

2 before insert or update on fl\_schedule

3 for each row

4 when(new.flno='CX-7520')

5 declare

6 num number(1);

7 begin

8 num:=to\_char(:new.departs,'d');

9 if(num!=3 and num!=0 and num!=6) then

10 RAISE\_APPLICATION\_ERROR(num=>-20008,msg=>'This flight must be scheduled on tuesday or friday or sunday');

11 end if;

12 end;

13 /

Trigger created.

SQL> INSERT INTO fl\_schedule VALUES ('CX-7520','15-apr-2005',0730,'16-apr-2005',0840,225.43);

1 row created.

SQL> REM INSERT INTO fl\_schedule VALUES ('CX-7520','13-apr-2005',0730,'16-apr-2005',0840,225.43);

SQL> INSERT INTO fl\_schedule VALUES ('CX-7520','13-apr-2005',0730,'16-apr-2005',0840,225.43);

INSERT INTO fl\_schedule VALUES ('CX-7520','13-apr-2005',0730,'16-apr-2005',0840,225.43)

\*

ERROR at line 1:

ORA-20008: This flight must be scheduled on tuesday or friday or sunday

ORA-06512: at "SYSTEM.TFS\_SK", line 6

ORA-04088: error during execution of trigger 'SYSTEM.TFS\_SK'

SQL> REM 3. An aircraft is assigned to a flight only if its cruising range is more than the distance of the

SQL> REM flights’ route.

SQL>

SQL> create or replace trigger cruise

2 before insert or update on routes

3 for each row

4 declare

5 cursor c1 is select a.cruisingrange from aircraft a,flights b,routes c

6 where c.routeid=b.rid and b.aid=a.aid and b.rid=:new.routeid;

7 cur aircraft.cruisingrange%type;

8 curs aircraft.cruisingrange%type;

9 begin

10 open c1;

11 fetch c1 into cur;

12 curs:=:new.distance;

13 if(cur < curs ) then

14 raise\_application\_error(num=>-20009,msg=>'cruisingrange distance is lesser');

15 end if;

16 end;

17 /

Trigger created.

SQL> INSERT INTO routes VALUES ('LW100','Los Angeles','Washington D.C.',23000);

INSERT INTO routes VALUES ('LW100','Los Angeles','Washington D.C.',23000)

\*

ERROR at line 1:

ORA-20009: cruisingrange distance is lesser

ORA-06512: at "SYSTEM.CRUISE", line 11

ORA-04088: error during execution of trigger 'SYSTEM.CRUISE'

SQL>