SQL> @C:\Users\vaish\Desktop\dbms\_lab\_home\ex7\lab7.sql

SQL> REM 1. The combination of Flavor and Food determines the product id. Hence, while

SQL> REM inserting a new instance into the Products relation, ensure that the same combination

SQL> REM of Flavor and Food is not already available.

SQL>

SQL> alter table RECEIPTS

2 drop column amount;

Table altered.

SQL>

SQL> CREATE or REPLACE TRIGGER combination

2 BEFORE INSERT on PRODUCTS for each row

3

4 declare

5 t\_food products.food%type;

6 t\_flavor products.flavor%type;

7 cursor c1 is select food,flavor from products;

8

9 begin

10 open c1;

11 fetch c1 into t\_food,t\_flavor;

12 while c1%found loop

13 if t\_food = :new.food and t\_flavor = :new.flavor then

14 raise\_application\_error(-20000,'error:combination present');

15 exit;

16 end if;

17 fetch c1 into t\_food,t\_flavor;

18 end loop;

19 end;

20 /

Trigger created.

SQL> insert into products values('55-ALM','Almond','Croissant',1.45);

insert into products values('55-ALM','Almond','Croissant',1.45)

\*

ERROR at line 1:

ORA-20000: error:combination present

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

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

SQL> REM 2. While entering an item into the item\_list relation, update the amount

SQL> REM in Receipts with the total amount for that receipt number.

SQL>

SQL> alter table RECEIPTS

2 add amount float default 0;

Table altered.

SQL>

SQL> update receipts r

2 set amount=(select sum(price) from item\_list i join products

3 on item=pid where r.rno=i.rno );

200 rows updated.

SQL>

SQL> create or replace trigger update\_amnt

2 after insert on item\_list for each row

3

4 declare

5 tprice products.price%type;

6

7 begin

8 select price into tprice

9 from products where pid=:new.item;

10

11 update receipts

12 set amount=amount+tprice

13 where rno=:new.rno;

14 end;

15 /

Trigger created.

SQL> select \* from receipts where rno=99002;

RNO RDATE CID AMOUNT

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

99002 13-OCT-07 20 5

SQL> insert into item\_list values(99002, 3, '50-CH');

1 row created.

SQL> select \* from receipts where rno=99002;

RNO RDATE CID AMOUNT

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

99002 13-OCT-07 20 6.75

SQL> REM 3. Implement the following constraints for Item\_list relation:

SQL> REM a. A receipt can contain a maximum of five items only.

SQL> REM b. A receipt should not allow an item to be purchased more than thrice.

SQL>

SQL> create or replace trigger five\_max

2 before insert or update on item\_list for each row

3 begin

4 if :new.ordinal>5 then

5 raise\_application\_error(-20200,:new.rno||' has more than 5 items');

6 end if;

7 end;

8 /

Trigger created.

SQL> select \* from item\_list where rno=52761;

RNO ORDINAL ITEM

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

52761 1 90-ALM-I

52761 2 26-8x10

52761 3 50-CHS

52761 4 90-BLK-PF

52761 5 90-ALM-I

SQL> insert into item\_list values(52761,6,'70-TU');

insert into item\_list values(52761,6,'70-TU')

\*

ERROR at line 1:

ORA-20200: 52761 has more than 5 items

ORA-06512: at "SYSTEM.FIVE\_MAX", line 3

ORA-04088: error during execution of trigger 'SYSTEM.FIVE\_MAX'

SQL> create or replace trigger pur\_thrice

2 before insert or update on item\_list for each row

3

4 declare

5 cursor c1 is select rno,item,count(\*)

6 from item\_list

7 group by rno,item;

8

9 rid item\_list.rno%type;

10 t\_item item\_list.item%type;

11 cnt int;

12

13 begin

14

15 open c1;

16 fetch c1 into rid,t\_item,cnt;

17 while c1%found loop

18 if rid = :new.rno and t\_item = :new.item and cnt>=3 then

19 raise\_application\_error(-20100,t\_item||' will be purchased more than thrice in '||rid);

20 exit;

21 end if;

22 fetch c1 into rid,t\_item,cnt;

23 end loop;

24 end;

25 /

Trigger created.

SQL> select \* from item\_list where rno=41028;

RNO ORDINAL ITEM

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

41028 1 90-BER-11

SQL> insert into item\_list values(41028, 2, '90-BER-11');

1 row created.

SQL> insert into item\_list values(41028, 3, '90-BER-11');

1 row created.

SQL> select \* from item\_list where rno=41028;

RNO ORDINAL ITEM

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

41028 1 90-BER-11

41028 2 90-BER-11

41028 3 90-BER-11

SQL> insert into item\_list values(41028, 4, '90-BER-11');

insert into item\_list values(41028, 4, '90-BER-11')

\*

ERROR at line 1:

ORA-20100: 90-BER-11 will be purchased more than thrice in 41028

ORA-06512: at "SYSTEM.PUR\_THRICE", line 16

ORA-04088: error during execution of trigger 'SYSTEM.PUR\_THRICE'

SQL> spool off