**1. Create table Employee having eid varchar (5), ename varchar(15), emobile number(10),**

**salary number(10), ecountry varchar(10), designation varchar(10).**

SQL> create table emp\_1(eid varchar(10) primary key,ename varchar(10),mobile number(10),salary number(10),country varchar(10),desgn varchar(10));

Table created.

SQL> desc emp\_1;

Name Null? Type

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

EID NOT NULL VARCHAR2(10)

ENAME VARCHAR2(10)

MOBILE NUMBER(10)

SALARY NUMBER(10)

COUNTRY VARCHAR2(10)

DESGN VARCHAR2(10)

**2. Insert 5 values inside the Employee table.**

SQL> insert into emp\_1 values('E0001','Alan','1234567890','20000','India','Technician');

1 row created.

SQL> insert into emp\_1 values('E0002','Bryan','1234567890','30000','UK','Manager');

1 row created.

SQL> insert into emp\_1 values('E0003','Ryan','1234567890','35000','USA','Engineer');

1 row created.

**3. Create view India\_emp\_view, list all from Employee table where ecountry=’India’**

SQL> Create view India\_Emp\_view as (select \* from emp\_1 where country='India');

View created.

**4. Create view Manager\_emp\_view, list all details for employee where designation is**

**manager.**

SQL> Create view Manager\_Emp\_view as (select \* from emp\_1 where desgn='Manager');

View created.

**5. Display India\_emp\_view**

SQL> select \* from India\_Emp\_view;

EID ENAME MOBILE SALARY COUNTRY DESGN

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

E0001 Alan 1234567890 20000 India Technician

**6. Display Manager\_emp\_view.**

SQL> select \* from Manager\_Emp\_view;

EID ENAME MOBILE SALARY COUNTRY DESGN

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

E0002 Bryan 1234567890 30000 UK Manager

**7. Insert 2 tuples in Employee where country of employee is India, and then check no. of**

**records in India\_emp\_view.**

SQL> insert into emp\_1 values('E0004','Ellen','1234567890','40000','India','Engineer');

1 row created.

SQL> insert into emp\_1 values('E0005','Jimmy','1234567890','45000','India','Secretary');

1 row created.

SQL> select \* from emp\_1;

EID ENAME MOBILE SALARY COUNTRY DESGN

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

E0001 Alan 1234567890 20000 India Technician

E0002 Bryan 1234567890 30000 UK Manager

E0003 Ryan 1234567890 35000 USA Engineer

E0004 Ellen 1234567890 40000 India Engineer

E0005 Jimmy 1234567890 45000 India Secretary

SQL> select \* from India\_Emp\_view;

EID ENAME MOBILE SALARY COUNTRY DESGN

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

E0001 Alan 1234567890 20000 India Technician

E0004 Ellen 1234567890 40000 India Engineer

E0005 Jimmy 1234567890 45000 India Secretary

**8. Update Manager\_emp\_view, update its emobile, and then check the record in**

**Employee table.**

SQL> update Manager\_Emp\_view set mobile='0987654321' where eid='E0002';

1 row updated.

SQL> select \* from emp\_1;

EID ENAME MOBILE SALARY COUNTRY DESGN

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

E0001 Alan 1234567890 20000 India Technician

E0002 Bryan 987654321 30000 UK Manager

E0003 Ryan 1234567890 35000 USA Engineer

E0004 Ellen 1234567890 40000 India Engineer

E0005 Jimmy 1234567890 45000 India Secretary

SQL> select \* from Manager\_Emp\_view;

EID ENAME MOBILE SALARY COUNTRY DESGN

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

E0002 Bryan 987654321 30000 UK Manager

**Lab Exercise on Triggers:-**

SQL>set serveroutput on;

**1. For Relational Schema Employee (Eid, ename, emobile, salary, ecountry,**

**designation),create following triggers:**

SQL> select \* from emp\_1;

EID ENAME MOBILE SALARY COUNTRY DESGN

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

E0001 Alan 1234567890 20000 India Technician

E0002 Bryan 987654321 30000 UK Manager

E0003 Ryan 1234567890 35000 USA Engineer

E0004 Ellen 1234567890 40000 India Engineer

E0005 Jimmy 1234567890 45000 India Secretary

**a. Write a trigger to avoid updating on Salary attribute for employee**

**relation.**

SQL> Create or replace trigger emp\_update

2 before update of salary on emp\_1

3 for each row

4 begin

5 Raise\_application\_error(-20112,'updation on salary not allowed!');

6 end;

7 /

Trigger created.

SQL> update emp\_1 set salary='80000' where ename='Alan';

update emp\_1 set salary='80000' where ename='Alan'

\*

ERROR at line 1:

ORA-20112: updation on salary not allowed!

ORA-06512: at "TECMPNB4.EMP\_UPDATE", line 2

ORA-04088: error during execution of trigger 'TECMPNB4.EMP\_UPDATE'

**b. Write a trigger to avoid insert on employee relation on Weekends.**

SQL> Create or replace trigger emp\_ins

2 before insert on emp\_1

3 begin

4 if to\_char(Sysdate,'Dy') in ('Sat','Tue')then

5 Raise\_application\_error(-20114,'No insert of record on employee table aloowed onsunday and tuesday!');

6 end if;

7 end;

8 /

Trigger created.

SQL> insert into emp\_1 values('E0006','James','1234567890','60000','India','Engineer');

insert into emp\_1 values('E0006','James','1234567890','60000','India','Engineer')

\*

ERROR at line 1:

ORA-20114: No insert of record on employee table aloowed onsunday and tuesday!

ORA-06512: at "TECMPNB4.EMP\_INS", line 3

ORA-04088: error during execution of trigger 'TECMPNB4.EMP\_INS'

**c. Write a trigger that displays the employee id for the record which gets**

**deleted.**

Create or replace trigger emp\_dell1

after delete on emp\_1

for each row

begin

dbms\_output.put\_line('old id that got deleted is' ||:old.eid);

end;

/

SQL> delete from emp\_1 where eid='E0004';

old id that got deleted isE0004

1 row deleted.

**2. For Relational Schema Department (Did, Dname, Location,Dmgr),create following**

**triggers:**

SQL> create table depte(did varchar(10) primary key , dname varchar(20),location varchar(10), dmgr varchar(10));

Table created.

SQL> desc depte;

Name Null? Type

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

DID NOT NULL VARCHAR2(10)

DNAME VARCHAR2(20)

LOCATION VARCHAR2(10)

DMGR VARCHAR2(10)

SQL> insert into depte values('D0001','Jim','India','Sean');

1 row created.

SQL> insert into depte values('D0002','Finance','UK','Shawn');

1 row created.

SQL> insert into depte values('D0003','RnD','USA','Joel');

1 row created.

SQL> select \* from depte;

DID DNAME LOCATION DMGR

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

D0001 HR India Sean

D0002 Finance UK Shawn

D0003 RnD USA Joel

**a. Write a trigger that displays the system date whenever there is an**

**update on Location attribute for department relation.**

SQL> Create or replace trigger depte\_updt

2 after update of location on depte

3 for each row

4 begin

5 dbms\_output.put\_line('Location updated on date ' ||to\_char(sysdate));

6 end;

7 /

Trigger created.

SQL> update depte set location='UK' where dname='HR';

Location updated on date 24-SEP-19

1 row updated.

**b. Write a trigger that outputs a statement stating old name which got**

**updated by the new name whenever the Dmgr gets updated for**

**department relation.**

SQL> Create or replace trigger depte\_days\_updt

2 after update of dmgr on depte

3 for each row

4 begin

5 dbms\_output.put\_line('Old Manager ' ||:old.dmgr || ' has changed to ' ||:new.dmgr);

6 end;

7 /

Trigger created.

SQL> update depte set dmgr='Jacob' where did='D0003';

Old Manager Joel has changed to Jacob

1 row updated.