**8#**

conn system/system

**a)**

**PERSON**

CREATE TABLE PERSON

(

DRIVER\_ID VARCHAR2(2),

NAME VARCHAR2(10),

ADDRESS VARCHAR2(10),

PRIMARY KEY(DRIVER\_ID)

);

DESC PERSON;

**CAR**

CREATE TABLE CAR

(

REG\_NO VARCHAR2(5),

MODEL VARCHAR2(10),

YEAR INT,

PRIMARY KEY(REG\_NO)

);

DESC CAR;

**ACCIDENT**

CREATE TABLE ACCIDENT

(

REPORT\_NUMBER INT,

ACCD\_DATE DATE,

LOCATION VARCHAR2(15),

PRIMARY KEY (REPORT\_NUMBER)

);

DESC ACCIDENT;

**OWNS**

CREATE TABLE OWNS

(

DRIVER\_ID VARCHAR(2),

REG\_NO VARCHAR2(5),

FOREIGN KEY (DRIVER\_ID) REFERENCES PERSON(DRIVER\_ID),

FOREIGN KEY (REG\_NO) REFERENCES CAR(REG\_NO)

);

DESC OWNS;

**PARTICIPATED**

CREATE TABLE PARTICIPATED

(

DRIVER\_ID VARCHAR2(2),

REG\_NO VARCHAR2(5),

REPORT\_NUMBER INT,

DAMAGE\_AMOUNT INT,

FOREIGN KEY(DRIVER\_ID) REFERENCES PERSON(DRIVER\_ID),

FOREIGN KEY(REG\_NO) REFERENCES CAR(REG\_NO),

FOREIGN KEY(REPORT\_NUMBER) REFERENCES ACCIDENT(REPORT\_NUMBER)

);

DESC PARTICIPATED;

**b)**

**PERSON**

INSERT INTO PERSON VALUES ('D1', 'Malik', 'Street\_1');

INSERT INTO PERSON VALUES ('D2', 'Saim', 'Street\_2');

INSERT INTO PERSON VALUES ('D3', 'Nabeel', 'Street\_3');

INSERT INTO PERSON VALUES ('D4', 'Hashir', 'Street\_4');

INSERT INTO PERSON VALUES ('D5', 'Zaid', 'Street\_5');

SELECT \* FROM PERSON;

**CAR**

INSERT INTO CAR VALUES ('REG\_1', 'Model\_1', 2008);

INSERT INTO CAR VALUES ('REG\_2', 'Model\_2', 2008);

INSERT INTO CAR VALUES ('REG\_3', 'Model\_3',2009);

INSERT INTO CAR VALUES ('REG\_4', 'Model\_4', 2009);

INSERT INTO CAR VALUES ('REG\_5', 'Model\_5', 2010);

SELECT \* FROM CAR;

**ACCIDENT**

INSERT INTO ACCIDENT VALUES (12, '12-FEB-2008', 'Location\_1');

INSERT INTO ACCIDENT VALUES (13, '13-FEB-2008', 'Location\_2');

INSERT INTO ACCIDENT VALUES (14, '14-FEB-2009', 'Location\_3');

INSERT INTO ACCIDENT VALUES (15, '15-FEB-2010', 'Location\_4');

INSERT INTO ACCIDENT VALUES (16, '16-FEB-2010', 'Location\_5');

SELECT \* FROM ACCIDENT;

**OWNS**

INSERT INTO OWNS VALUES ('D1', 'REG\_1');

INSERT INTO OWNS VALUES ('D2', 'REG\_2');

INSERT INTO OWNS VALUES ('D3', 'REG\_3');

INSERT INTO OWNS VALUES ('D4', 'REG\_4');

INSERT INTO OWNS VALUES ('D5', 'REG\_5');

SELECT \* FROM OWNS;

**PARTICIPATED**

INSERT INTO PARTICIPATED VALUES ('D1', 'REG\_1', 12, 20000);

INSERT INTO PARTICIPATED VALUES ('D2', 'REG\_2',13,10000);

INSERT INTO PARTICIPATED VALUES ('D3', 'REG\_3', 14,90000);

INSERT INTO PARTICIPATED VALUES ('D4', 'REG\_4',15,9000);

INSERT INTO PARTICIPATED VALUES ('D5', 'REG\_5',16,900);

SELECT \* FROM PARTICIPATED;

**c)**

SELECT \* FROM PARTICIPATED;

UPDATE PARTICIPATED SET DAMAGE\_AMOUNT=25000 WHERE REG\_NO='REG\_1' AND REPORT\_NUMBER=12;

SELECT \* FROM PARTICIPATED;

**d)**

SELECT \* FROM ACCIDENT;

INSERT INTO ACCIDENT VALUES (17, '12-MAR-2010', 'Location\_6');

SELECT \* FROM ACCIDENT;

**e)**

SELECT \* FROM ACCIDENT;

SELECT \* FROM PARTICIPATED;

SELECT \* FROM PERSON;

SELECT COUNT(\*) FROM PERSON, ACCIDENT, PARTICIPATED WHERE((ACCIDENT.REPORT\_NUMBER=PARTICIPATED. REPORT\_NUMBER)AND(PARTICIPATED.DRIVER\_ID=PERSON.DRIVER\_ID)AND (to\_char(ACCIDENT.ACCD\_DATE, 'YYYY')='2008'));

**Or**

SELECT COUNT(\*) FROM ACCIDENT WHERE((to\_char(ACCIDENT.ACCD\_DATE, 'YYYY')='2008'));

**Or**

Best Query If Same Driver Was Present In Multiple Accidents Then Each Count Should Be Distinct i.e. the Total Number Of People That Were Involved In Accident Should Be Only 1 If Same Driver Participated In Multiple Accidents In 2008 🡪

UPDATE PARTICIPATED SET DRIVER\_ID='D1' WHERE REG\_NO='REG\_2';

UPDATE PARTICIPATED SET REG\_NO='REG\_1' WHERE DRIVER\_ID='D1' AND REPORT\_NUMBER=13;

SELECT COUNT (DISTINCT PERSON.DRIVER\_ID) FROM CAR, PERSON, ACCIDENT, PARTICIPATED WHERE( (ACCIDENT.REPORT\_NUMBER=PARTICIPATED. REPORT\_NUMBER)AND(PARTICIPATED.DRIVER\_ID=PERSON.DRIVER\_ID)AND (to\_char(ACCIDENT.ACCD\_DATE, 'YYYY')='2008'));

**f)**

SELECT \* FROM CAR;

SELECT \* FROM ACCIDENT;

SELECT \* FROM PARTICIPATED;

SELECT CAR.MODEL,COUNT(\*) FROM CAR, ACCIDENT, PARTICIPATED WHERE ((ACCIDENT.REPORT\_NUMBER=PARTICIPATED.REPORT\_NUMBER)AND(PARTICIPATED.REG\_NO=CAR.REG\_NO) AND (CAR.MODEL= 'Model\_1')) GROUP BY CAR.MODEL;

**Or**

SELECT CAR.MODEL,COUNT(\*) FROM CAR, PARTICIPATED WHERE ((PARTICIPATED.REG\_NO=CAR.REG\_NO) AND (CAR.MODEL= 'Model\_1')) GROUP BY CAR.MODEL;