

ii. Create tables, populate with data and construct queries (advanced) in SQL to extract information from the car insurance company's database.

```
CREATE TABLE CUSTOMER(  
CID VARCHAR2(8) PRIMARY KEY CHECK(CID LIKE 'C%'),  
C_NAME VARCHAR2(20) NOT NULL,  
C_PNO NUMBER(10),  
C_ADDRESS VARCHAR2(20) NOT NULL);
```

```
DESC CUSTOMER;
```

```
SQL> @6.sql
```

Table created.

Name	Null?	Type
CID	NOT NULL	VARCHAR2(8)
C_NAME	NOT NULL	VARCHAR2(20)
C_PNO		NUMBER(10)
C_ADDRESS	NOT NULL	VARCHAR2(20)

```
CREATE TABLE CAR(  
LNO VARCHAR2(8) PRIMARY KEY CHECK(LNO LIKE 'L%'),  
MODEL VARCHAR2(20) NOT NULL,  
CID VARCHAR2(8),  
FOREIGN KEY(CID) REFERENCES CUSTOMER(CID) ON DELETE CASCADE);
```

```
DESC CAR;
```

```
SQL> @6.sql
```

Table created.

Name	Null?	Type
LNO	NOT NULL	VARCHAR2(8)
MODEL	NOT NULL	VARCHAR2(20)
CID		VARCHAR2(8)

```
CREATE TABLE ACCIDENT(  
RNO VARCHAR2(8) PRIMARY KEY CHECK(RNO LIKE 'R%'),  
ADATE DATE,  
DAMAGE_AMT NUMBER(10,2),  
LNO VARCHAR2(8),  
FOREIGN KEY(LNO) REFERENCES CAR(LNO) ON DELETE CASCADE);
```

```
DESC ACCIDENT;
```

SQL> @6.sql

Table created.

Name	Null?	Type
-----	-----	-----
RNO	NOT NULL	VARCHAR2(8)
ADATE		DATE
DAMAGE_AMT		NUMBER(10,2)
LNO		VARCHAR2(8)

```
CREATE TABLE COMPREHENSIVE_CAR(  
INSURENCE_TYPE VARCHAR2(20),  
LNO VARCHAR2(8),  
FOREIGN KEY(LNO) REFERENCES CAR(LNO) ON DELETE CASCADE);
```

DESC COMPREHENSIVE_CAR;

SQL> @6.sql

Table created.

Name	Null?	Type
-----	-----	-----
INSURENCE_TYPE		VARCHAR2(20)
LNO		VARCHAR2(8)

```
CREATE TABLE THIRD_PARTY_CAR(  
T_INSURENCE_TYPE VARCHAR2(20),  
LNO VARCHAR2(8),  
FOREIGN KEY(LNO) REFERENCES CAR(LNO) ON DELETE CASCADE);
```

DESC THIRD_PARTY_CAR;

SQL> @6.sql

Table created.

Name	Null?	Type
-----	-----	-----
T_INSURENCE_TYPE		VARCHAR2(20)
LNO		VARCHAR2(8)

```

INSERT INTO CUSTOMER VALUES('C1','DIPU','4813','KOLKATA');
INSERT INTO CUSTOMER VALUES('C2','JOY','4814','KOLKATA');
INSERT INTO CUSTOMER VALUES('C3','DEBU','4815','KOLKATA');
INSERT INTO CUSTOMER VALUES('C4','SWAPNA','4816','KOLKATA');
INSERT INTO CUSTOMER VALUES('C5','INDRA','4817','KOLKATA');

```

```

SELECT * FROM CUSTOMER;

```

CID	C_NAME	C_PNO	C_ADDRESS
C1	DIPU	4813	KOLKATA
C2	JOY	4814	KOLKATA
C3	DEBU	4815	KOLKATA
C4	SWAPNA	4816	KOLKATA
C5	INDRA	4817	KOLKATA

```

INSERT INTO CAR VALUES('L1','AUDI R8','C1');
INSERT INTO CAR VALUES('L2','PAGANI ZONDA R','C2');
INSERT INTO CAR VALUES('L3','FORD MUSTANG','C3');
INSERT INTO CAR VALUES('L4','FERRARI LAFERRARI','C4');
INSERT INTO CAR VALUES('L5','911 GT2 RS','C5');

```

```

SELECT * FROM CAR;

```

LNO	MODEL	CID
L1	AUDI R8	C1
L2	PAGANI ZONDA R	C2
L3	FORD MUSTANG	C3
L4	FERRARI LAFERRARI	C4
L5	911 GT2 RS	C5

```

INSERT INTO ACCIDENT VALUES('R01',TO_DATE('19-03-24','DD-MM-YY'),100000,'L1');
INSERT INTO ACCIDENT VALUES('R02',TO_DATE('20-03-24','DD-MM-YY'),150000,'L2');
INSERT INTO ACCIDENT VALUES('R03',TO_DATE('21-03-24','DD-MM-YY'),200000,'L3');
INSERT INTO ACCIDENT VALUES('R04',TO_DATE('22-03-24','DD-MM-YY'),250000,'L4');
INSERT INTO ACCIDENT VALUES('R05',TO_DATE('23-03-24','DD-MM-YY'),300000,'L5');

```

```

SELECT * FROM ACCIDENT;

```

RNO	ADATE	DAMAGE_AMT	LNO
R01	19-03-24	100000	L1
R02	20-03-24	150000	L2
R03	21-03-24	200000	L3
R04	22-03-24	250000	L4
R05	23-03-24	300000	L5

```

INSERT INTO COMPREHENSIVE_CAR VALUES('COMPREHENSIVE1','L1');
INSERT INTO COMPREHENSIVE_CAR VALUES('COMPREHENSIVE2','L2');
INSERT INTO COMPREHENSIVE_CAR VALUES('COMPREHENSIVE3','L3');
INSERT INTO COMPREHENSIVE_CAR VALUES('COMPREHENSIVE4','L4');
INSERT INTO COMPREHENSIVE_CAR VALUES('COMPREHENSIVE5','L5');

```

```

SELECT * FROM COMPREHENSIVE_CAR;

```

INSURENCE_TYPE	LNO
COMPREHENSIVE1	L1
COMPREHENSIVE2	L2
COMPREHENSIVE3	L3
COMPREHENSIVE4	L4
COMPREHENSIVE5	L5

```

INSERT INTO THIRD_PARTY_CAR VALUES('THIRD-PARTY-1','L1');
INSERT INTO THIRD_PARTY_CAR VALUES('THIRD-PARTY-2','L2');
INSERT INTO THIRD_PARTY_CAR VALUES('THIRD-PARTY-3','L3');
INSERT INTO THIRD_PARTY_CAR VALUES('THIRD-PARTY-4','L4');
INSERT INTO THIRD_PARTY_CAR VALUES('THIRD-PARTY-5','L5');

```

```

SELECT * FROM THIRD_PARTY_CAR;

```

T_INSURENCE_TYPE	LNO
THIRD-PARTY-1	L1
THIRD-PARTY-2	L2
THIRD-PARTY-3	L3
THIRD-PARTY-4	L4
THIRD-PARTY-5	L5

Write and run the following SQL queries for your database:

a. Find the total number of people who owned cars that were involved in accidents in 2010.

```

SELECT COUNT(C.CID) FROM CUSTOMER C JOIN CAR CA ON
CA.CID=C.CID JOIN ACCIDENT A ON A.LNO=CA.LNO WHERE
EXTRACT(YEAR FROM A.ADATE)=2010;

```

```

SQL> @6.sql

```

COUNT(CID)
1

b. Find the number of accidents in which the cars belonging to "XYZ" were involved.

```
SELECT COUNT(A.RNO) FROM ACCIDENT A JOIN CAR CA ON CA.LNO=A.LNO WHERE
CA.MODEL='PAGANI ZONDA R';
```

```
SQL> @6.sql
```

```
COUNT(RNO)
-----
1
```

c.Add a new accident to the database; assume any values for required attributes.

```
INSERT INTO ACCIDENT VALUES('R07',TO_DATE('19-03-25','DD-MM-YY'),20000,'L2');
```

```
SELECT * FROM ACCIDENT;
```

```
SQL> @6.sql
```

```
1 row created.
```

RNO	ADATE	DAMAGE_AMT	LNO
R01	19-03-24	100000	L1
R02	20-03-24	150000	L2
R03	21-03-24	200000	L3
R04	22-03-24	250000	L4
R05	23-03-24	300000	L5
R06	19-03-10	100000	L1
R07	19-03-25	20000	L2

```
7 rows selected.
```

d.Delete the model 'Scorpio' belonging to "ABC".

```
DELETE FROM CAR WHERE MODEL='SCORPIO' AND CID='ABC';
```

```
SQL> @6.sql
```

```
0 rows deleted.
```

e.Update the damage amount for the car with license number "AIBPC2010" in the accident with report number "FIR271" to Rs. 5000.

```
SELECT * FROM ACCIDENT;
```

```
UPDATE ACCIDENT SET DAMAGE_AMT=5000 WHERE
LNO='AIBPC2010' AND RNO='FIR271';
```

```
SELECT * FROM ACCIDENT;
```

SQL> @6.sql

RNO	ADATE	DAMAGE_AMT	LNO
R01	19-03-24	100000	L1
R02	20-03-24	150000	L2
R03	21-03-24	200000	L3
R04	22-03-24	250000	L4
R05	23-03-24	300000	L5
R06	19-03-10	100000	L1
R07	19-03-25	20000	L2

7 rows selected.

0 rows updated.

RNO	ADATE	DAMAGE_AMT	LNO
R01	19-03-24	100000	L1
R02	20-03-24	150000	L2
R03	21-03-24	200000	L3
R04	22-03-24	250000	L4
R05	23-03-24	300000	L5
R06	19-03-10	100000	L1
R07	19-03-25	20000	L2

7 rows selected.