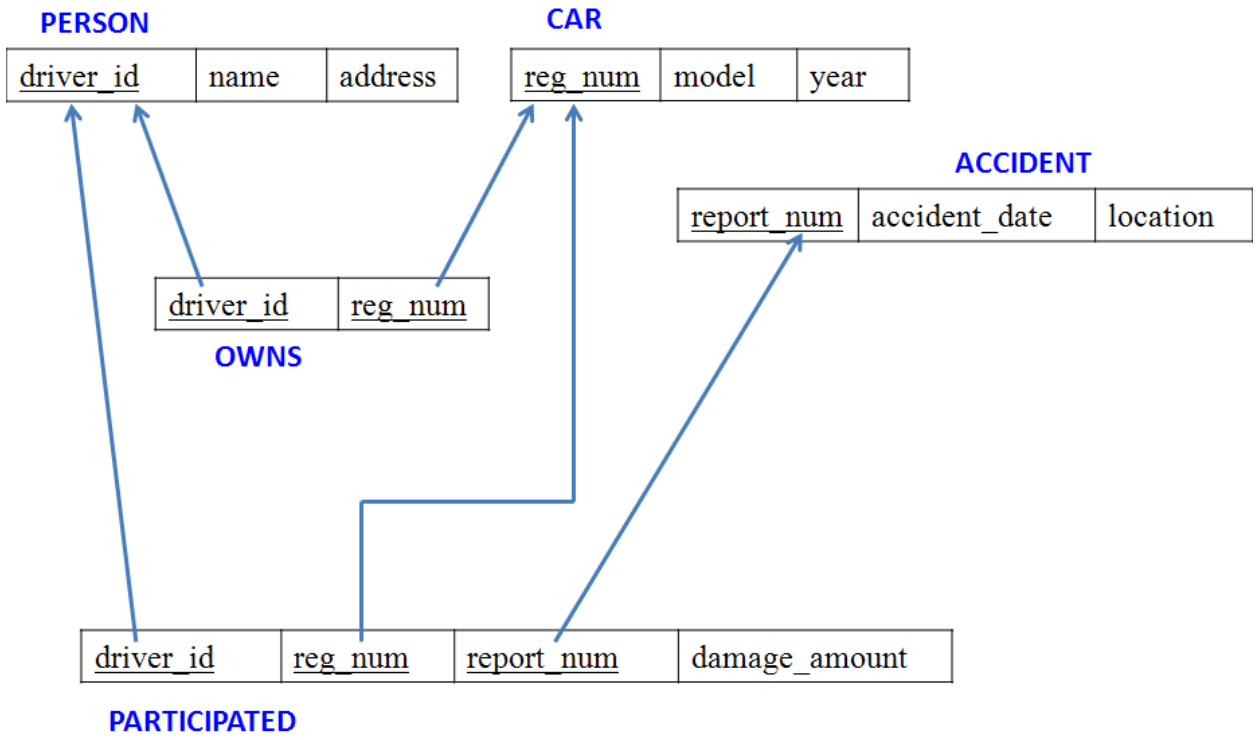
PROGRAM 1: INSURANCE DATABASE

Schema diagram



Consider the Insurance database given below. The data types are specified.

PERSON (driver_id: String, name: String, address: String)
CAR (reg_num: String, model: String, year: int)
ACCIDENT (report_num: int, accident_date: date, location: String)
OWNS (driver_id: String, reg_num: String)
PARTICIPATED (driver_id: String,reg_num: String, report_num: int, damage_amount: int)

List of operations

- **Create the above tables by properly specifying the primary keys and the foreign keys.**
- **Enter at least five tuples for each relation**
- **Display Accident date and location**
- **Display driver id who did the accident damage greater than or equal to Rs.25000**

i) Create the above tables by properly specifying the primary keys and the foreign keys.

SQL> **create table person (driver_id varchar(10),**
name varchar(20),
address varchar(30),
primary key(driver_id));
Table created.

SQL> **desc person**

Name	Null?	Type
DRIVER_ID	NOT NULL	VARCHAR2(10)
NAME		VARCHAR2(20)
ADDRESS		VARCHAR2(30)

SQL> **create table car(reg_num varchar(10),model varchar(10),year int, primary key(reg_num));**
Table created.

SQL> **desc car**

Name	Null?	Type
REG_NUM	NOT NULL	VARCHAR2(10)
MODEL		VARCHAR2(10)
YEAR		NUMBER(38)

SQL> **create table accident(report_num int, accident_date date, location varchar(20),primary key(report_num));**

Table created.

SQL> **desc accident**

Name	Null?	Type
REPORT_NUM	NOT NULL	NUMBER(38)
ACCIDENT_DATE		DATE
LOCATION		VARCHAR2(20)

SQL> **create table owns(driver_id varchar(10),reg_num varchar(10),**
primary key(driver_id, reg_num),
foreign key(driver_id) references person(driver_id),
foreign key(reg_num) references car(reg_num));

Table created.

SQL> **desc owns**

Name	Null?	Type
DRIVER_ID	NOT NULL	VARCHAR2(10)
REG_NUM	NOT NULL	VARCHAR2(10)

SQL>**create table participated(driver_id varchar(10), reg_num varchar(10),**
report_num int, damage_amount int,
primary key(driver_id, reg_num, report_num),

foreign key(driver_id) references person(driver_id),
foreign key(reg_num) references car(reg_num),
foreign key(report_num) references accident(report_num));
Table created.
SQL> **desc participated**

Name	Null?	Type
DRIVER_ID	NOT NULL	VARCHAR2(10)
REG_NUM	NOT NULL	VARCHAR2(10)
REPORT_NUM	NOT NULL	NUMBER(38)
DAMAGE_AMOUNT		NUMBER(38)

ii) Enter at least five tuples for each relation.

Tables

PERSON

driver_id	name	address
A01	Richard	Srinivas nagar
A02	Pradeep	Rajaji nagar
A03	Smith	Ashok nagar
A04	Venu	N R Colony
A05	Jhon	Hanumanth nagar

CAR

reg_num	model	year
KA052250	Indica	1990
KA031181	Lancer	1957
KA095477	Toyota	1998
KA053408	Honda	2008
KA041702	Audi	2005

OWNS

driver_id	reg_num
A01	KA052250
A02	KA053408
A03	KA031181
A04	KA095477
A05	KA041702

ACCIDENT

report_num	accident_date	location
11	01-JAN-03	Mysore Road
12	02-FEB-04	South end Circle
13	21-JAN-03	Bull temple Road
14	17-FEB-08	Mysore Road
15	04-MAR-05	Kanakpura Road

PARTICIPATED

driver_id	reg_num	report_num	damage_amount
A01	KA052250	11	10000
A02	KA053408	12	50000
A03	KA095477	13	25000
A04	KA031181	14	3000
A05	KA041702	15	5000

.

QUERY 2: Enter at least five tuples for each relation

SQL> insert into person values('&driver_id','&name','&address');
Enter value for driver_id: A01
Enter value for name: Richard
Enter value for address: Srinivas Nagar
old 1: insert into person values('&driver_id','&name','&address')
new 1: insert into person values('A01','Richard','Srinivas Nagar')

1 row created.

SQL> /
Enter value for driver_id: A02
Enter value for name: Pradeep
Enter value for address: Rajajinagar
old 1: insert into person values('&driver_id','&name','&address')
new 1: insert into person values('A02','Pradeep','Rajajinagar')

1 row created.

SQL> **commit;**
Commit complete.

SQL> select * from person;

```
DRIVER_ID  NAME                 ADDRESS
---------- -------------------- ------------------------------
A01        Richard              Srinivas Nagar
A02        Pradeep              Rajajinagar
A03        Smith                Ashoknagar
A04        Venu                 N.R.Colony
A05        John                 Hanumanth Nagar
```

SQL> insert into car values('&reg_num','&model', &year);

Enter value for reg_num: KA052250
Enter value for model: Indica
Enter value for year: 1990
old 1: insert into car values('&reg_num','&model', &year)
new 1: insert into car values('KA052250','Indica', 1990)

1 row created.

SQL> /
Enter value for reg_num: KA031181
Enter value for model: Lancer
Enter value for year: 1957
old 1: insert into car values('&reg_num','&model',&year)
new 1: insert into car values('KA031181','Lancer', 1957)

1 row created.

SQL> **commit;**

Commit complete.

SQL> select * from car;

REG_NUM	MODEL	YEAR
KA052250	Indica	1990
KA031181	Lancer	1957
KA095477	Toyota	1998
KA053408	Honda	2008
KA041702	Audi	2005

SQL> insert into accident values(&report_num,'&accident_date','&location');

Enter value for report_num: 11
Enter value for accident_date: 01-JAN-03
Enter value for location: Mysore Road
old 1: insert into accident values(&report_num,'&accident_date','&location')
new 1: insert into accident values(111,'01-JAN-03','Mysore Road')

1 row created.

SQL> **commit;**

Commit complete.
SQL> select * from accident;

REPORT_NUM	ACCIDENT_DATE	LOCATION
11	01-JAN-03	Mysore Road
12	02-FEB-04	Southend Circle
13	21-JAN-03	Bulltemple Road

```
14          17-FEB-08          Mysore Road
15          04-MAR-05          Kanakpura Road
```

SQL> insert into owns values ('&driver_id','&reg_num');

```
Enter value for driver_id: A01
Enter value for reg_num: KA052250
old   1: insert into owns values('&driver_id','&reg_num')
new   1: insert into owns values('A01','KA052250')
1 row created.
```

SQL> **commit;**
Commit complete.

SQL> select * from owns;

```
DRIVER_ID      REG_NUM
---------------    ----------
A01                KA052250
A02                KA053408
A04                KA031181
A03                KA095477
A05                KA041702
```

SQL> insert into participated values ('&driver_id','&reg_num',&report_num, &damage_amount);

```
Enter value for driver_id: A01
Enter value for reg_num: KA052250
Enter value for report_num: 11
Enter value for damage_amount: 10000
old   1: insert into participated values ('&driver_id','&reg_num',&report_num,&damage_amount)
new   1: insert into participated values('A01','KA052250',11,10000)

1 row created.

SQL> /
Enter value for driver_id: A02
Enter value for reg_num: KA053408
Enter value for report_num: 12
Enter value for damage_amount: 50000
old   1: insert into participated values ('&driver_id','&reg_num', &report_num,& damage_amount)
new   1: insert into participated values('A02','KA053408',12,50000)

1 row created.
```

SQL> **commit;**
Commit complete.

SQL> select * from participated;

```
DRIVER_ID   REG_NUM       REPORT_NUM  DAMAGE_AMOUNT
---------------- ---------------- ---------- ------------------------------
A01            KA052250          11                      10000
```

A02	KA053408	12	50000
A03	KA095477	13	25000
A04	KA031181	14	3000
A05	KA041702	15	5000

QUERY 3:

a) Update the damage amount to 25000 for the car with a specific reg_num (example 'KA053408') for which the accident report number was 12.

SQL> update participated set damage_amount=25000 where reg_num='KA053408' and report_num=12;

1 row updated.

SQL> **commit;**

Commit complete.

SQL> **select * from participated;**

DRIVER_ID	REG_NUM	REPORTNUM	DAMAGE_AMOUNT
A01	KA052250	11	10000
A02	KA053408	12	25000
A03	KA095477	13	25000
A04	KA031181	14	3000
A05	KA041702	15	5000

b) Add a new accident to the database.

SQL> **insert into accident values(16,'15-MAR-08','Domlur');**
1 row created.

SQL> **select * from accident;**

REPORT_NUM	ACCIDENT_DATE	LOCATION
11	01-JAN-03	Mysore Road
12	02-FEB-04	Southend Circle
13	21-JAN-03	Bulltemple Road
14	17-FEB-08	Mysore Road
15	04-MAR-05	Kanakpura Road
16	15-MAR-08	Domlur

6 rows selected.

- **Display Accident date and location**

```
select accident_date, location
from ACCIDENT;
```

- **Display driver id who did the accident damage greater than or equal to Rs.25000**

```
select driver_id
from PARTICIPATED
where damage_amount >=25000;
```