

PROGRAM 1: INSURANCE DATABASE

Consider the Insurance database given below. The primary keys are underlined and the data types are specified.

PERSON (driver-id #: String, name: String, address: String)

CAR (Regno: String, model: String, year: int)

ACCIDENT (report-number: int, date: date, location: String)

OWNS (driver-id #: String, Regno: String)

PARTICIPATED (driver-id: String, Regno: String, report-number: int, damage-amount: int)

- i. Create the above tables by properly specifying the primary keys and the foreign keys.
- ii. Enter at least five tuples for each relation.
- iii. Demonstrate how you
 - a. Update the damage amount for the car with a specific Regno in the accident with report number 12 to 25000.
 - b. Add a new accident to the database.
- iv. Find the total number of people who owned cars that were involved in accidents in 2008.
- v. Find the number of accidents in which cars belonging to a specific model were involved.

```
create database insurance;  
use insurance;
```

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

```
create table person(driver_id varchar(10),name varchar(10),address  
varchar(10),primary key(driver_id));
```

```
create table car(regno varchar(10),model varchar(10),year int,primary key(regno));
```

```
create table accident(report_number int,accd_date date,location varchar(10),primary  
key(report_number));
```

```
create table owns(driver_id varchar(10),regno varchar(10),primary  
key(driver_id,regno),foreign key(driver_id) references person(driver_id),foreign  
key(regno) references car(regno))
```

```
create table participated(driver_id varchar(10),regno varchar(10),report_number
int,damage_amount int,primary key(driver_id,regno,report_number),foreign
key(driver_id) references person(driver_id),foreign key(regno) references
car(regno),foreign key(report_number) references accident(report_number));
```

ii. Enter at least five tuples for each relation.

```
insert into person values('KA01','Prathik','Bangalore');
insert into person values('KA02','Karthik','Bangalore');
insert into person values('KA03','Vikas','Bangalore');
insert into person values('KA04','Prakash','Mangalore');
insert into person values('KA05','Sandesh','Hubli');
select * from person;
```

```
insert into car values('KA-05-0336','Skoda','2014');
insert into car values('KA-05-5765','Alto','2011');
insert into car values('KA-05-6764','Reva','2012');
insert into car values('KA-05-9732','Scorpio','2015');
insert into car values('KA-05-9876','Swift','2003');
select * from car;
```

```
insert into accident values(101,'2008-11-11','bangalore');
insert into accident values(102,'2010-08-11','kerala');
insert into accident values(103,'2009-08-11','tamil nadu');
insert into accident values(104,'2019-02-11','kengeri');
insert into accident values(105,'2020-02-11','surat');
select * from accident;
```

```
insert into owns values('KA01','KA-05-0336');
insert into owns values('KA02','KA-05-5765');
insert into owns values('KA03','KA-05-6764');
insert into owns values('KA04','KA-05-9732');
insert into owns values('KA05','KA-05-9876');
select * from owns;
```

```
insert into participated values('KA01','KA-05-0336',101,5000);
insert into participated values('KA02','KA-05-5765',102,4000);
insert into participated values('KA03','KA-05-6764',102,4000);
insert into participated values('KA04','KA-05-9732',104,2500);
```

```
insert into participated values('KA05','KA-05-9876',105,1500);  
select * from participated;
```

iii. Demonstrate how you

- a. Update the damage amount for the car with a specific Regno in the accident with report number 12 to 25000.
- b. Add a new accident to the database.

```
a. update participated set damage_amount=25000 where report_number=101 and  
regno='KA-05-0336';
```

```
b. insert into accident values(106,'2015-01-08','chennai');
```

iv. Find the total number of people who owned cars that were involved in accidents in 2008.

```
select count(distinct o.driver_id) as People from owns o, participated p, accident a where  
a.accd_date like '%08' and o.regno=p.regno and p.report_number=a.report_number;
```

v. Find the number of accidents in which cars belonging to a specific model were involved.

```
select count(*) as TotalCars from car c, participated p where c.regno=p.regno and  
c.model='Alto';
```