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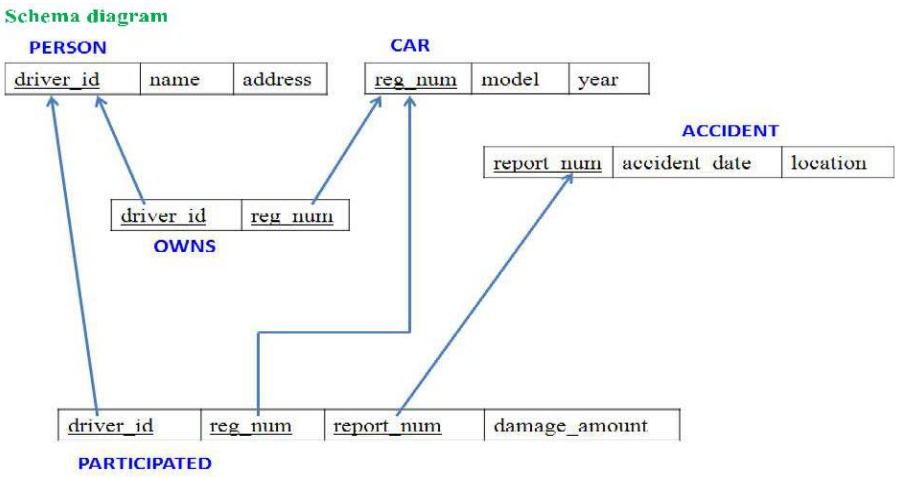
1BM20CS401
4A

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 involved in accidents in 2008.
v. Find the number of accidents in which cars belonging to a specific model were involved



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

```
CREATE DATABASE Insurance_database;

USE Insurance_database;

create table person
(
   driver_id varchar(15) unique NOT NULL,
   name varchar(20) NOT NULL,
   address varchar(30),
   primary key(driver_id)
);
```

```
create table car
(
    reg_num varchar(20) unique NOT NULL,
    model varchar(25),
    year int,
    primary key(reg_num)
);
create table accident
(
     report_num int unique NOT NULL,
     accident_date date,
     location varchar(30),
     primary key(report_num)
);
create table owns
(
       driver_id varchar(20),
       reg_num varchar(20),
       FOREIGN KEY(driver_id) REFERENCES person(driver_id),
       FOREIGN KEY(reg_num) REFERENCES car(reg_num)
);
create table participated
(
       driver_id varchar(15) unique NOT NULL,
      reg_num varchar(20) unique NOT NULL,
     report_num int unique NOT NULL,
     damage_amount int,
```

```
    FOREIGN KEY(driver_id) REFERENCES person(driver_id),
    FOREIGN KEY(reg_num) REFERENCES car(reg_num),
    FOREIGN KEY(report_num) REFERENCES accident(report_num)
);
```

```
insert into person
values ("A01","Richard","Srinivas nagar"),("A02","Pradeep","Rajaji nagar"),
("A03","Smith","Ashok nagar"),("A04","Venu","N R Colony"),("A05","Jhon","Hanumanth nagar");
select * from 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
NULL	NULL	NULL

```
insert into car
values ("KA052250","Indica",1990),("KA031181","Lancer",1957),("KA095477","Toyota",1998),
("KA053408","Honda",2008),("KA041702","Audi",2005);
select * from car;
```

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

```
insert into owns
values ("A01","KA052250"),("A02","KA053408"),("A03","KA031181"),
("A04","KA095477"),("A05","KA041702");
```

select * from owns;

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

insert into accident

values (11,'2003-01-03',"Mysore Road") , (12,'2002-02-04',"South end Circle"),(13,'2021-01-03',"Bull temple Road"), (14,'2017-02-08',"Mysore Road"),(15,'2004-03-05',"Kanakpura Road");

select * from accident;

report_num	accident_date	location
11	2003-01-03	Mysore Road
12	2002-02-04	South end Circle
13	2021-01-03	Bull temple Road
14	2017-02-08	Mysore Road
15	2004-03-05	Kanakpura Road
NULL	NULL	NULL

insert into participated

values ("A01","KA052250",11,10000),("A02","KA053408",12,50000),("A03","KA095477",13,25000),

("A04","KA031181",14,3000),("A05","KA041702",15,5000);

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
NULL	NULL	NULL	NULL

/*a. Update the damage amount for the car with a specific Regno in the accident with report number 12 to 25000*/

update PARTICIPATED

SET damage_amount=25000

WHERE reg_num="KA053408";

select* from PARTICIPATED;

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

/*b. Add a new accident to the database.*/

insert into ACCIDENT

values (16,"2018-03-29","KORMANGLA");

select* from ACCIDENT;

report_num	accident_date	location
11	2003-01-03	Mysore Road
12	2002-02-04	South end Circle
13	2021-01-03	Bull temple Road
14	2017-02-08	Mysore Road
15	2004-03-05	Kanakpura Road
16	2018-03-29	KORMANGLA
NULL	NULL	NULL

/*c. Find the total number of people who owned cars that involved in accidents in 2008.*/

SELECT COUNT(accident_date) AS accidentsin2008

FROM ACCIDENT

WHERE YEAR(accident_date)=2008;

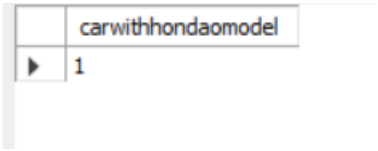
accidentsin2008
0

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

SELECT COUNT(model) AS carwithhondaomodel

FROM car

WHERE model="HONDA";



	carwithhondaomodel
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