

**Sudhanva S M – 1BM24CS296**

**Insurance Database**

```
CREATE DATABASE insurance;
USE insurance;
```

```
CREATE TABLE PERSON (
    driver_id VARCHAR(10) PRIMARY KEY,
    name VARCHAR(50),
    address VARCHAR(100)
);
```

```
CREATE TABLE CAR (
    reg_num VARCHAR(10) PRIMARY KEY,
    model VARCHAR(20),
    year INT
);
```

```
CREATE TABLE ACCIDENT (
    report_num INT PRIMARY KEY,
    accident_date DATE,
    location VARCHAR(100)
);
```

```
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)
);
```

```
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)
);
```

```
INSERT INTO PERSON (driver_id, name, address) VALUES
('A01', 'Richard', 'Srinivas nagar'),
('A02', 'Pradeep', 'Rajaji nagar'),
('A03', 'Smith', 'Ashok nagar'),
('A04', 'Venu', 'N R Colony'),
('A05', 'Jhon', 'Hanumanth nagar');
```

```
INSERT INTO CAR (reg_num, model, year) VALUES
('KA052250', 'Indica', 1990),
('KA031181', 'Lancer', 1957),
('KA095477', 'Toyota', 1998),
('KA053408', 'Honda', 2008),
('KA041702', 'Audi', 2005);
```

```
INSERT INTO ACCIDENT (report_num, accident_date, location) VALUES
(11, '2019-01-24', 'Mysore Road'),
(12, '2019-02-04', 'South End Circle'),
(13, '2019-01-21', 'Bull temple Road'),
(14, '2019-02-17', 'Mysore Road'),
(15, '2019-03-04', 'Kanakpura Road');
```

```

INSERT INTO OWNS (driver_id, reg_num) VALUES
('A01', 'KA052250'),
('A02', 'KA053408'),
('A03', 'KA031181'),
('A04', 'KA095477'),
('A05', 'KA041702');

```

```

INSERT INTO PARTICIPATED (driver_id, reg_num, report_num, damage_amount) VALUES
('A01', 'KA052250', 11, 10000),
('A02', 'KA053408', 12, 50000),
('A03', 'KA095477', 13, 25000),
('A04', 'KA031181', 14, 5000),
('A05', 'KA041702', 15, 5000);

```

#### **Queries:**

```
select * from accident;
```

	report_num	accident_date	location
▶	11	2001-01-03	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 driver_id from participated
```

```
where damage_amount >= 25000;
```

	driver_id
▶	A02
	A03
	A05

```

select p.driver_id, p.name, o.reg_num, c.model
from person p, owns o, car c
where p.driver_id = o.driver_id and c.reg_num = o.reg_num;

```

	driver_id	name	reg_num	model
▶	A01	Richard	KA052250	Indica
	A02	Pradeep	KA053408	Honda
	A03	Smith	KA031181	Lancer
	A04	Venu	KA095477	Toyota
	A05	Jhon	KA041702	Audi

```
select p.driver_id, p.name, a.location, pa.damage_amount
from person p, accident a, participated pa
where p.driver_id = pa.driver_id and a.report_num = pa.report_num;
```

	driver_id	name	location	damage_amount
▶	A01	Richard	Mysore Road	10000
	A02	Pradeep	South end Circle	25000
	A03	Smith	Bull temple Road	25000
	A04	Venu	Mysore Road	3000
	A05	Jhon	Kanakpura Road	25000

```
select a.report_num, p.driver_id, p.damage_amount
from accident a, participated p
where a.report_num = p.report_num;
```

	report_num	driver_id	damage_amount
▶	11	A01	10000
	12	A02	25000
	13	A03	25000
	14	A04	3000
	15	A05	25000

```
select p.name, p.driver_id
from person p, accident a, participated pa
where p.driver_id = pa.driver_id and pa.report_num = a.report_num
group by p.name, p.driver_id
having count(pa.report_num) > 1;
```

	name	driver_id

```
select c.reg_num
from car c
```

```
where c.reg_num not in
```

```
(select p.reg_num
```

```
from participated p);
```

	reg_num
*	NULL

```
select max(accident_date) as Latest_Date
```

```
from accident;
```

	Latest_Date
▶	2021-01-03

```
select driver_id, avg(damage_amount)
```

```
from participated
```

```
group by driver_id;
```

	driver_id	avg(damage_amount)
▶	A01	10000.0000
	A02	25000.0000
	A03	25000.0000
	A04	3000.0000
	A05	25000.0000

```
update participated
```

```
set damage_amount = 25000
```

```
where driver_id = 'A05';
```

```
select * from participated;
```

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

```

select driver_id, damage_amount
from participated
where damage_amount = (select max(damage_amount)
from participated);

```

	driver_id	damage_amount
▶	A02	25000
	A03	25000
	A05	25000
*	NULL	NULL

```

select p.driver_id, c.model , p.damage_amount
from participated p, car c
where damage_amount > 20000 and p.reg_num = c.reg_num;

```

	driver_id	model	damage_amount
▶	A02	Honda	25000
	A03	Lancer	25000
	A05	Audi	25000

```

create view AccSum as
select a.report_num, a.accident_date, a.location, count(p.driver_id) as total_drivers,
sum(p.damage_amount) as total_damage
from accident a, participated p
where a.report_num = p.report_num
group by a.report_num, a.accident_date, a.location;

```

**SELECT \* FROM AccSum;**

	report_num	accident_date	location	total_drivers	total_damage
▶	11	2001-01-03	Mysore Road	1	10000
	12	2002-02-04	South end Circle	1	25000
	13	2021-01-03	Bull temple Road	1	25000
	14	2017-02-08	Mysore Road	1	3000
	15	2004-03-05	Kanakpura Road	1	25000