DBMS LAB -1

```sql
create database info
use info;
create table person (
driver_id varchar(10),
name varchar(20),
address varchar(30),
primary key(driver_id)
);
 create table car(
 reg_num varchar(10),
 model varchar(10),
 year int,
 primary key(reg_num)
 );
create table accident(
report_num int,
accident_date date,
location varchar(20),
primary key(report_num)
);
create table own (
driver_id varchar(20),
reg_num varchar(10),
primary key(driver_id, reg_num),
foreign key(driver_id) references person (driver_id),
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    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','Srinivasnagar'),('A02','Pradeep','Rajajinagar'),('A03','Smith','Ashoknagar'),
    ('A04','Renu','NRnagar'),('A05','John','Hanumannagar');


    insert into car (reg_num, model, year)

    values ('KA052250','Indica','1999'),('KA052350','Lancer','2001'),('KA059950','Toyota','2010'),
    ('KA052490','Honda','2007'),('KA0599650','Audi','2006');


    insert into accident(report_num, accident_date, location)

    values('11', '2000-01-03', 'Mysure'),('12', '2010-06-20', 'Hubli'),('13', '2009-07-13', 'Dharwad'),('14',
    '2014-01-16', 'Bangalore'),('15', '2003-05-07', 'Gadag');


    insert into own(driver_id, reg_num)

    values ('A01','KA052250'),('A02','KA052350'),('A03','KA059950'),('A04','KA052490'),
    ('A05','KA0599650');
```

insert into participated (driver_id, reg_num, report_num, damage_amount)

values ('A01','KA052250','T1','24000'),('A02','KA052350','12','18000'),('A03','KA059950','13','30000'),('A04','KA052490','14','10000'),('A05','KA0599650','15','10001');

LAB QUERIES:

1.SELECT accident_date, location FROM Accident;

2.SELECT DISTINCT driver_id

FROM Participation

WHERE damage_amount >= 25000;

3. SELECT driver_id, model FROM Own

JOIN Car ON car_id = car_id;

4. SELECT accident_id, a.accident_date, location, driver_id, damage_amount

FROM Accident

JOIN Participation ON a.accident_id = p.accident_id;

5. SELECT accident_id, SUM(damage_amount) AS total_damageFROM Participation

GROUP BY accident_id;

6. SELECT driver_id FROM Participation

GROUP BY driver_id

HAVING COUNT(DISTINCT accident_id) > 1;

7. SELECT driver_id, AVG(damage_amount) AS avg_damage FROM Participation

GROUP BY driver_id;

8. SELECT driver_id, accident_id, damage_amount FROM Participated

WHERE damage_amount = (

  SELECT MAX(damage_amount) FROM Participation

);

9. CREATE VIEW AccidentSummary AS

SELECT a.accident_id, a.accident_date, a.location,

```sql
        COUNT(p.driver_id) AS participated count,
        SUM(p.damage_amount) AS total_damage
FROM Accident a
JOIN Participated p ON a.accident_id = p.accident_id
GROUP BY a.accident_id, a.accident_date, a.location;
10. SELECT driver_id, accident_id, damage_amount
FROM Participated
WHERE damage_amount = (
    SELECT MAX(damage_amount) FROM Participated
);
```