

NAME: SUMANT SHRIDHAR

BATCH: 3K1

DBMS LAB

DATE: 10/10/25

INSURANCE DATABASE

```
create database sumant_shridhar;  
use sumant_shridhar ;  
create table person (  
    driver_id varchar(10) primary key,  
    name varchar(20),  
    address varchar(30)  
);
```

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

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

```
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','Rajajinagar'),  
('A03','Smith','Ashoknagar'),  
('A04','Venu','N.R.Colony'),  
('A05','John','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, '2003-01-01', 'Mysore Road'),  
(12, '2004-02-02', 'Southend Circle'),  
(13, '2003-01-21', 'Bulltemple Road'),  
(14, '2008-02-17', 'Mysore Road'),
```

```
(15, '2005-03-04', 'Kanakpura Road');
```

```
insert into owns(driver_id,reg_num) values
```

```
('A01','KA052250'),
```

```
('A02','KA053408'),
```

```
('A03','KA095477'),
```

```
('A04','KA031181'),
```

```
('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',14,3000),
```

```
('A05','KA041702',15,5000);
```

```
-- Queries
```

```
-- 1. Display accident date and location
```

```
select accident_date, location
```

```
from accident;
```

```
-- 2. Display driver id who did the accident damage >= 25000
```

```
select driver_id
```

```
from participated
```

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

```
-- 3. List each driver with the cars they own (one row per ownership)
```

```
select p.name, c.model
```

```
from person p, car c, owns o
```

```
where (o.driver_id=p.driver_id and o.reg_num=c.reg_num);
```

-- 4. Show accidents and the drivers involved (including damage amount)

```
select p.driver_id, pe.name, p.report_num, a.location, a.accident_date
from participated p, accident a, person pe
where (p.report_num = a.report_num and pe.driver_id=p.driver_id);
```

-- 5. Add a new accident

```
insert into accident(report_num, accident_date, location) values
(16, '2008-03-15', 'Domlur');
```

-- 6. Total damage per accident report

```
select report_num,damage_amount
from participated;
```

-- 7. Drivers who were involved in more than one accident

```
select driver_id
from participated
group by driver_id
having count(report_num) > 1;
```

-- 8. Cars that never had an accident (owned but not in participated)

```
select o.reg_num, o.driver_id
from owns o
where o.reg_num NOT IN (
    SELECT reg_num FROM participated
);
```

-- 9. Latest accident (most recent accident_date)

```
select *  
from accident  
order by accident_date desc  
limit 1;
```

-- 10. Average damage amount per driver

```
select driver_id, avg(damage_amount) as average  
from participated  
group by driver_id;
```

-- 11. Update: set damage_amount = 25000 for a specific car & report (example)

```
update participated  
set damage_amount = 25000  
where reg_num = 'KA052250' AND report_num = 11;  
select * from participated;
```

-- 12. Find drivers who caused the maximum damage in any single accident

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

-- 13. Show cars (model) involved in accidents with total damage > 20000

```
select c.model, p.damage_amount  
from car c, participated p  
where c.reg_num=p.reg_num
```

```
and p.damage_amount>20000;
```

```
-- 14. Create a view summarizing accidents with participants count and total damage
```

```
create view accident_summ as
```

```
select COUNT(driver_id) AS participant_count, SUM(damage_amount) AS total_damage
```

```
from participated;
```

```
select * from accident_summ;
```

10/10/25

Insurance Database

```
create database sumant;
```

```
use sumant;
```

```
create table person(  
    driver_id varchar(10) primary key,  
    name varchar(20),  
    address varchar(30)  
);
```

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

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

```
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
);

```

```

insert into person(driver_id, name, address) values
('A01', 'Richard', 'Srinivas Nagar'),
('A02', 'Pradeep', 'Rajajinagar'),
('A03', 'Smith', 'Ashoknagar');

```

```

insert into car(reg-num, model, year) values
('KA052250', 'Indica', 1990),
('KA031181', 'Lancer', 1957),
('KA095477', 'Toyota', 1998);

```

```

insert into accident(report-num, accident-date, location)
values
(11, '2003-01-01', 'Mysore Road'),
(12, '2004-02-02', 'South End Circle'),
(13, '2003-01-21', 'Bull Temple Road');

```

insert into owns (driver_id, reg-num) values
('A01', 'KA052250'),
('A02', 'KA053408'),
('A03', 'KA095477');

insert into participated (driver_id, reg-num, report-num,
damage-amount) values
('A01', 'KA052250', 11, 10000),
('A02', 'KA053408', 12, 50000),
('A03', 'KA095477', 13, 25000);

-- Queries

-- 1. Display accident date and location
select accident_date, location
from accident;

-- 2. Display driver id who did the accident damage >= 25000
~~select driver_id~~
~~from participated~~
~~where damage-amount >= 25000;~~

O/P:

accident_date	location
2003-01-01	Mysore Road
2004-02-02	Southend Circle
2003-01-21	Bulltemple Road
2008-02-17	Mysore Road
2005-03-04	Kanakpura Road

-- 2. Display drivers who caused damage ≥ 25000

```
select driver_id
from participated
where damage_amount  $\geq 25000$ ;
```

O/p:

driver_id

A02

A03

-- 3. List each driver with the cars they own

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

O/p:

name

model

Richard

Indica

Pradeep

Honda

Smith

Toyota

Venue

Lancer

John

Audi

-- 4. Show accidents and the drivers involved including damage amount

```
select p.driver_id, pe.name, p.report_num, a.location,
       a.accident_date
from participated p, person pe, accident a
where (p.report_num = a.report_num and
       pe.driver_id = p.driver_id);
```

O/p:

driver-id	name	report-num	location	accident-date
A01	Richard	11	Mysore Road	2003-01-09
A02	Pradeep	12	South End Circle	2004-02-02
A03	Smith	13	Bull temple Road	2003-01-25
A04	Venu	14	Mysore Road	2008-02-17
A05	John	15	Kanakapura Road	2005-03-04

-- 5. Add a new accident
insert into accident (report-num, accident-date,
location) values
(16, '2008-03-15', 'Domkur');

-- 6. Total damage per accident report
select report-num, damage-amount
from participated;

O/p:

report-num	damage-amount
11	10000
12	25000
13	25000
14	30000
15	5000

-- 7. Drivers who were involved in more than
one accident
select driver-id
from participated
group by driver-id
having count(report-num) > 1;

o/p: driver-id

-- 8. Cars that never had an accident

select o.reg-num, o.driver-id

from owns o

where o.reg-num not in (

select reg-num

from participated

);

o/p: reg-num driver-id

NULL

NULL

-- 9. Latest accident

select *

from accident

order by accident_date desc

limit 1;

o/p: report-num accident-date location

16

2008-03-15

Domleur

-- 10. Average damage amount per driver

select driver-id, avg(damage-amount) as average

from participated

group by driver-id;

O/p:

driver_id	average
A01	10000.0000
A02	25000.0000
A03	25000.0000
A04	3000.0000
A05	5000.0000

-- 11. Update : set damage_amount = 25000 for a specific car & report

update participated

set damage_amount = 25000

where reg_num = 'KA052250' and report_num = 11;

select * from participated;

O/p:

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

-- 12. Drivers who caused max damage in any single accident

select driver_id, damage_amount
from participated

where damage_amount = (

select max(damage_amount) from participated)

~~***~~

<u>O/p:</u>	driver_id	damage_amount
	A01	25000
	A02	25000
	A03	25000

-- 13. Show cars (model) in accidents with total damage > 20000

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

<u>O/p:</u>	model	damage_amount
	Indica	25000
	Honda	25000
	Toyota	25000

-- 14. Create a view summarizing accident with participants count and total damage

create view accident_summ as
 select count(driver_id) AS participant_count,
 sum(damage_amount) AS total_damage
 from participated;
 select * from accident_summ;

<u>O/p:</u>	participant_count	total_damage
	5	83000