

**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
('AO1', 'Richard', 'Srinivas Nagar'),
('AO2', 'Pradeep', 'Rajajinagar'),
('AO3', '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  
('AO1', 'KA052250'),

('AO2', 'KA053408'),

('AO3', 'KA095477');

insert into participated (driver\_id, reg-num, report\_num,  
damage-amount) values

('AO1', 'KA052250', 11, 10000),

('AO2', 'KA053408', 12, 50000),

('AO3', '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	Southern Circle
	2003 -01 -21	Bul temple road
	2008 -02 -17	Mysore road
	2005 -03 -04	Kanakpura road

-- 2. Display drivers who caused damage  $\geq 25000$

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
Venu	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	MysoreRoad	2003-01-09
A02	Pradeep	12	SouthEnd Circle	2004-02-02
A03	Smith	13	Bulltemple Road	2003-01-21
A04	Venu	14	Mysore Road	2008-02-17
A05	John	15	KanakpuraRoad	2005-03-04

-- 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;

report_num	damage_amount
11	10000
12	25000
13	25000
14	3000
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 b0.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 Domlur

-- 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	30000.0000
A05	50000.0000

-- 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	KA 052250	11	25000
A02	KA 053408	12	25000
A03	KA 095477	13	25000
A04	KA 031181	14	3000
A05	KA 041702	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)

Ans

<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