

Insurance Database

Question

(Week 1)

PERSON (driver_id: String, name: String, address: String)

CAR (reg_num: String, model: String, year: int)

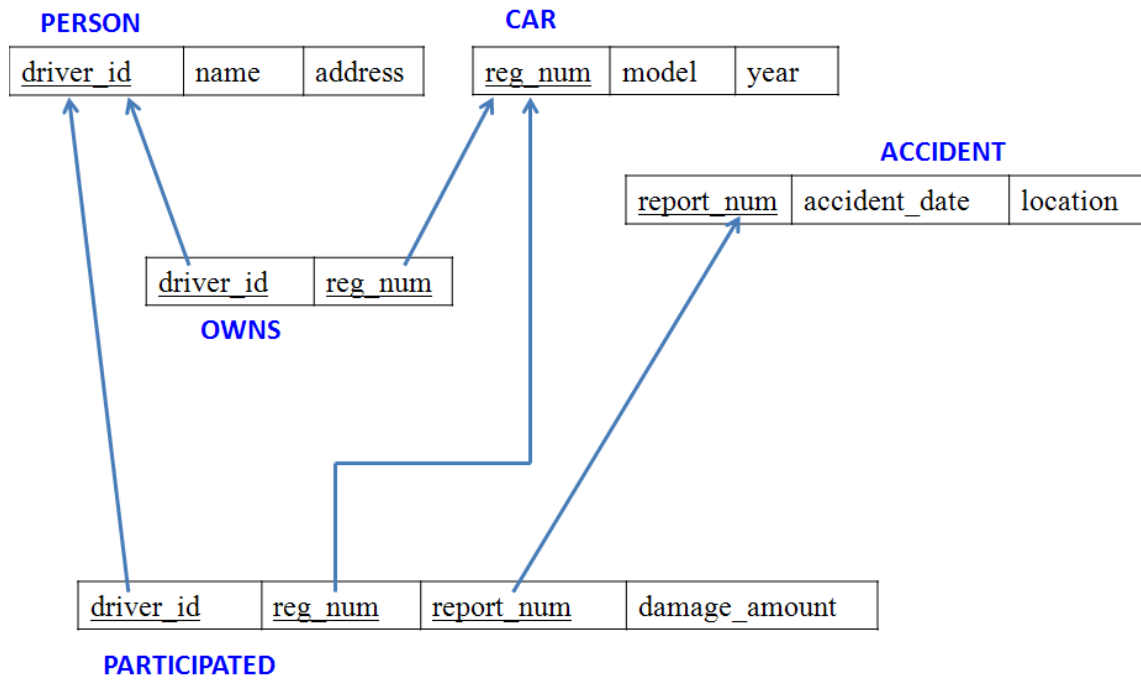
ACCIDENT (report_num: int, accident_date: date, location: String)

OWNS (driver_id: String, reg_num: String)

PARTICIPATED (driver_id: String, reg_num: String, report_num: int, damage_amount: int)

- Create the above tables by properly specifying the primary keys and the foreign keys.
- Enter at least five tuples for each relation
- Display Accident date and location
- Display driver id who did the accident damage greater than or equal to Rs.25000
- Add a new accident to the database.
- To Do
- Display Accident date and location
- Display driver id who did accident with damage amount greater than or equal to Rs.25000

Schema Diagram



Create database

```
create database insurance_cs065;
```

```
use insurance_cs065;
```

Create table

```
create table person(  
  driver_id varchar(20),  
  name varchar(30),  
  address varchar(50),  
  PRIMARY KEY(driver_id)  
);  
  
create table car(  
  reg_num varchar(15),  
  model varchar(10),  
  year int,
```

```
PRIMARY KEY(reg_num)

);

create table owns(

driver_id varchar(20),

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 accident(

report_num int,

accident_date date,

location varchar(50),

PRIMARY KEY(report_num)

);

create table participated(

driver_id varchar(20),

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)

);
```

Structure of the table

desc person;

Field	Type	Null	Key	Default	Extra
driver_id	varchar(20)	NO	PRI	NULL	
reg_num	varchar(10)	NO	PRI	NULL	
report_num	int	NO	PRI	NULL	
damage_amount	int	YES		NULL	

desc accident;

Field	Type	Null	Key	Default	Extra
report_num	int	NO	PRI	NULL	
accident_date	date	YES		NULL	
location	varchar(50)	YES		NULL	

desc participated;

Field	Type	Null	Key	Default	Extra
driver_id	varchar(20)	NO	PRI	NULL	
reg_num	varchar(10)	NO	PRI	NULL	
report_num	int	NO	PRI	NULL	
damage_amount	int	YES		NULL	

desc car;

Field	Type	Null	Key	Default	Extra
reg_num	varchar(15)	NO	PRI	NULL	
model	varchar(10)	YES		NULL	
year	int	YES		NULL	

desc owns;

Field	Type	Null	Key	Default	Extra
driver_id	varchar(20)	NO	PRI	NULL	
reg_num	varchar(10)	NO	PRI	NULL	

Inserting Values to the table

```
insert into person values("A01","Richard", "Srinivas nagar");
```

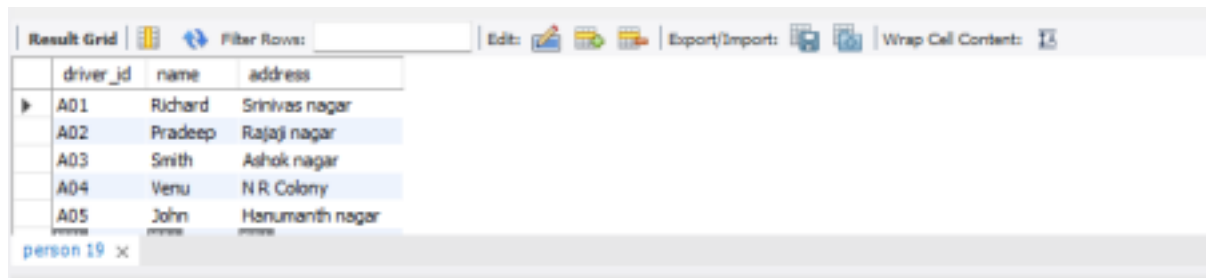
```
insert into person values("A02","Pradeep", "Rajaji nagar");
```

```
insert into person values("A03","Smith", "Ashok nagar");
```

```
insert into person values("A04","Venu", "N R Colony");
```

```
insert into person values("A05","John", "Hanumanth nagar");
```

```
select * from person;
```



The screenshot shows a database application interface with a toolbar at the top containing icons for 'Result Grid', 'Filter Rows', 'Edit', 'Export/Import', and 'Wrap Cell Content'. Below the toolbar is a table with the following data:

driver_id	name	address
A01	Richard	Srinivas nagar
A02	Pradeep	Rajaji nagar
A03	Smith	Ashok nagar
A04	Venu	N R Colony
A05	John	Hanumanth nagar

At the bottom of the table, there is a tab labeled 'person 19' with a close button 'x'.

```
insert into car values("KA052250","Indica", "1990");
```

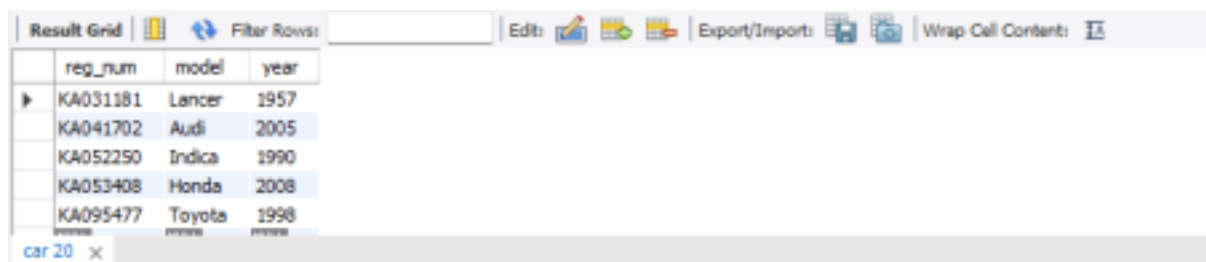
```
insert into car values("KA031181","Lancer", "1957");
```

```
insert into car values("KA095477","Toyota", "1998");
```

```
insert into car values("KA053408","Honda", "2008");
```

```
insert into car values("KA041702","Audi", "2005");
```

```
select * from car;
```



The screenshot shows a database application interface with a toolbar at the top containing icons for 'Result Grid', 'Filter Rows', 'Edit', 'Export/Import', and 'Wrap Cell Content'. Below the toolbar is a table with the following data:

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

At the bottom of the table, there is a tab labeled 'car 20' with a close button 'x'.

```
insert into owns values("A01","KA052250");
```

```
insert into owns values("A02","KA031181");
```

```
insert into owns values("A03","KA095477");
```

```
insert into owns values("A04","KA053408");
```

```
insert into owns values("A05","KA041702");
```

```
select * from owns;
```

Result Grid		Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
driver_id	reg_num				
A02	KA031181				
A05	KA041702				
A01	KA052250				
A04	KA053408				
A03	KA095477				

owns 22 x

```

insert into accident values(11,'2003-01-01',"Mysore Road");
insert into accident values(12,'2004-02-02',"South end Circle");

insert into accident values(13,'2003-01-21',"Bull temple Road");
insert into accident values(14,'2008-02-17',"Mysore Road");
insert into accident values(15,'2004-03-05',"Kanakpura Road");

select * from accident;

```

Result Grid		Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
report_num	accident_date	location			
11	2003-01-01	Mysore Road			
12	2004-02-02	South end Circle			
13	2003-01-21	Bull temple Road			
14	2008-02-17	Mysore Road			
15	2004-03-05	Kanakpura Road			

accident 23 x

```

insert into participated values("A01","KA052250",11,10000);
insert into participated values("A02","KA053408",12,50000);

insert into participated values("A03","KA095477",13,25000);
insert into participated values("A04","KA031181",14,3000);
insert into participated values("A05","KA041702",15,5000);

select * from participated;

```

Result Grid		Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
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		

participated 24 x

Queries

- **Update the damage amount to 25000 for the car with a specific reg-num (example 'KA053408') for which the accident report number was 12.**

update participated

set damage_amount=25000

where reg_num='KA053408' and report_num=12;

Result Grid	Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
	driver_id	reg_num	report_num	damage_amount
▶	A02	KA053408	12	25000
	A03	KA095477	13	25000
•	NULL	NULL	NULL	NULL

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

select count(distinct driver_id) CNT

from participated a, accident b

where a.report_num=b.report_num and b.accident_date like '2008%';

	driver_id
▶	A02
	A03

- **Add a new accident to the database.**

insert into accident values(16,'2008-03-08',"Domlur"); select * from accident;

	report_num	accident_date	location
▶	11	2001-01-03	mysoreroad
	12	2002-02-04	southendcircle
	13	2021-01-03	bulltempleroad
	14	2017-02-08	mysoreroad)
	15	2004-03-05	kanakpuraroad

- **Display Accident date and location**

```
select accident_date ,location from accident;
```

	accident_date	location
▶	2001-01-03	mysoreroad
	2002-02-04	southendcircle
	2021-01-03	bulltempleroad
	2017-02-08	mysoreroad)
	2004-03-05	kanakpuraroad

- **Display driver id who did accident with damage amount greater than or equal to Rs.25000**

```
select driver_id from participated  
where damage_amount>=25000;
```

	driver_id
▶	a02
	a03