

Lab 1

Question:

Consider the Insurance database given below. The primary keys are underlined and the data types are specified.

PERSON (driver-id #: String, name: String, address: String)

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

ACCIDENT (report-number: int, date: date, location: String)

OWNS (driver-id #: String, Regno: String)

PARTICIPATED (driver-id: String, Regno: String, report-number: int, damage-amount: int)

Queries:

- i. Create the above tables by properly specifying the primary keys and the foreign keys.

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.3309 seconds.)

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

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

Your SQL query has been executed successfully.

```
desc person
```

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+ Options

Field	Type	Null	Key	Default	Extra
driver_id	varchar(10)	NO	PRI	NULL	
name	varchar(20)	YES		NULL	
address	varchar(30)	YES		NULL	

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.2096 seconds.)

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

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Your SQL query has been executed successfully.

```
desc car
```

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+ Options

Field	Type	Null	Key	Default	Extra
reg_num	varchar(10)	NO	PRI	NULL	
model	varchar(10)	YES		NULL	
year	int(11)	YES		NULL	

✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.2495 seconds.)

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

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

Your SQL query has been executed successfully.

```
desc accident
```

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+ Options

Field	Type	Null	Key	Default	Extra
report_num	int(11)	NO	PRI	NULL	
accident_date	date	YES		NULL	
location	varchar(20)	YES		NULL	

✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.3451 seconds.)

```
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))
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

Your SQL query has been executed successfully.

```
desc owns
```

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+ Options

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

✔ MySQL returned an empty result set (i.e. zero rows). (Query took 0.3808 seconds.)

```
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))
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

Your SQL query has been executed successfully.

```
desc participated
```

[\[Edit inline\]](#) [\[Edit \]](#) [\[Create PHP code \]](#)

+ Options

Field	Type	Null	Key	Default	Extra
driver_id	varchar(10)	NO	PRI	NULL	
reg_num	varchar(10)	NO	PRI	NULL	
report_num	int(11)	NO	PRI	NULL	
damage_amount	int(11)	YES		NULL	

ii. Enter at least five tuples for each relation.

Showing rows 0 - 4 (5 total, Query took 0.0040 seconds.)

```
select * from person
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all

 | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

driver_id

name

address

Edit

Copy

Delete

AO1RajIndiranagar

Edit

Copy

Delete

AO2SurajKoramangla

Edit

Copy

Delete

AO3RahulBasvangudi

Edit

Copy

Delete

AO4NainaFrazer Town

Edit

Copy

Delete

AO5SanjanaMG Road

Showing rows 0 - 4 (5 total, Query took 0.0054 seconds.)

```
select * from car
```

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Show all

 | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

reg_num

model

year

Edit

Copy

Delete

KA018756BMW2005

Edit

Copy

Delete

KA073421Swift1998

Edit

Copy

Delete

KA520191Ferrari1999

Edit

Copy

Delete

KA876534Mercedes2001

Edit

Copy

Delete

KA993344Maruthi1992

Showing rows 0 - 4 (5 total, Query took 0.0020 seconds.)

```
select * from accident
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all

 | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

report_num

accident_date

location

Edit

Copy

Delete

1011999-01-23Church Street

Edit

Copy

Delete

1022001-08-02New Thippasandra

Edit

Copy

Delete

1032005-11-18Commercial Street

Edit

Copy

Delete

1041994-07-09Koramangla

Edit

Copy

Delete

1052011-09-22Gandhi Nagar

✓ Showing rows 0 - 4 (5 total, Query took 0.0008 seconds.)

```
select * from owns
```

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	driver_id	reg_num
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A01	KA993344
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A02	KA073421
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A03	KA876534
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A04	KA018756
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A05	KA520191

✓ Showing rows 0 - 4 (5 total, Query took 0.0009 seconds.)

```
select * from participated
```

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	driver_id	reg_num	report_num	damage_amount
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A01	KA993344	101	1000
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A02	KA073421	102	2000
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A03	KA876534	103	1500
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A04	KA018756	104	3400
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A05	KA520191	105	5000

iii. Demonstrate how you

a. Update the damage amount for the car with a specific Regno in the accident with report number 101 to 25000.

✓ 1 row affected. (Query took 0.0313 seconds.)

```
update participated set damage_amount=25000 where reg_num='KA993344' and report_num=101
```

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✓ Showing rows 0 - 4 (5 total, Query took 0.0008 seconds.)

```
select * from participated
```

☐ Profiling [\[Edit inline\]](#) [\[Edit\]](#) [\[Explain SQL\]](#) [\[Create PHP code\]](#) [\[Refresh\]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	driver_id	reg_num	report_num	damage_amount
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A01	KA993344	101	25000
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A02	KA073421	102	2000
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A03	KA876534	103	1500
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A04	KA018756	104	3400
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	A05	KA520191	105	5000

b. Add a new accident to the database.

insert into accident values(106, '2001-02-22',Domlur);

Showing rows 0 - 5 (6 total, Query took 0.0016 seconds.)


```
select * from accident
```

 Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all
 Number of rows: 25
 Filter rows: Search this table
 Sort by key: None

+ Options

	report_num	accident_date	location
<input type="checkbox"/> Edit Copy Delete	101	1999-01-23	Church Street
<input type="checkbox"/> Edit Copy Delete	102	2001-08-02	New Thippasandra
<input type="checkbox"/> Edit Copy Delete	103	2005-11-18	Commercial Street
<input type="checkbox"/> Edit Copy Delete	104	1994-07-09	Koramangla
<input type="checkbox"/> Edit Copy Delete	105	2011-09-22	Gandhi Nagar
<input type="checkbox"/> Edit Copy Delete	106	2001-02-22	Domlur

iv. Find the total number of people who owned cars that involved in accidents in 2008.

Showing rows 0 - 0 (1 total, Query took 0.0029 seconds.)


```
select count(distinct driver_id) CNT from participated a, accident b where a.report_num=b.report_num and b.accident_date like '%08'
```

 Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all
 Number of rows: 25
 Filter rows: Search this table

+ Options

CNT
0

v. Find the number of accidents in which cars belonging to a specific model were involved.

Showing rows 0 - 0 (1 total, Query took 0.0026 seconds.)


```
select count(report_num) CNT from car c,participated p where c.reg_num=p.reg_num and model='Mercedes'
```

 Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all
 Number of rows: 25
 Filter rows: Search this table

+ Options

CNT
1