

PROGRAM 1: INSURANCE DATABASE

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)

DEPARTMENT OF CSE

- 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 0.9490 seconds.)

```
create table person( driver_id varchar(10) PRIMARY KEY, name varchar(20), address varchar(30) )
```

✓ MySQL returned an empty result set (i.e. zero rows).
(Query took 0.3010 seconds.)

```
create table car( regno varchar(10) PRIMARY KEY, model  
varchar(20), year int )
```

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

✓ MySQL returned an empty result set (i.e. zero rows).
(Query took 0.2290 seconds.)

```
create table accident( report_number int PRIMARY KEY,  
dateAcc date, location varchar(30) )
```

✓ MySQL returned an empty result set (i.e. zero rows).
(Query took 1.4060 seconds.)

```
create table owns( driver_id varchar(10), regno
varchar(10), FOREIGN KEY(driver_id) REFERENCES
person(driver_id) ON UPDATE CASCADE ON DELETE SET null,
FOREIGN KEY(regno) REFERENCES car(regno) ON UPDATE CASCADE
ON DELETE SET null )
```

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

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.3880 seconds.)

```
create table participated( driver_id varchar(10), regno varchar(10), report_number int, damage_amount int, FOREIGN key(driver_id) REFERENCES person(driver_id) ON UPDATE CASCADE
ON DELETE SET null, FOREIGN key(regno) REFERENCES car(regno) ON UPDATE CASCADE ON DELETE SET null, FOREIGN key(report_number) REFERENCES accident(report_number) ON UPDATE
CASCADE ON DELETE SET null )
```

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

Output:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> accident	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> car	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
<input type="checkbox"/> owns	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	48.0 KiB	-
<input type="checkbox"/> participated	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	64.0 KiB	-
<input type="checkbox"/> person	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_general_ci	16.0 KiB	-
5 tables	Sum	0	InnoDB	utf8mb4_general_ci	160.0 KiB	0 B

ii. Enter at least five tuples for each relation.

✓ 1 row inserted. (Query took 0.1500 seconds.)

```
INSERT INTO `person`(`driver_id`, `name`, `address`) VALUES ('A1','Raj','R.T.Nagar, Bengaluru')
```

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

✓ 1 row inserted. (Query took 0.2140 seconds.)

```
INSERT INTO `person`(`driver_id`, `name`, `address`) VALUES ('A2','Raja','R.K.Nagar, Bengaluru')
```

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

✓ 1 row inserted. (Query took 0.1620 seconds.)

```
INSERT INTO `person`(`driver_id`, `name`, `address`) VALUES ('A3','Shash','T.M.Nagar, Bengaluru')
```

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

✓ 1 row inserted. (Query took 0.0540 seconds.)

```
INSERT INTO `person`(`driver_id`, `name`, `address`) VALUES ('A4','Paris','Shivajinagar, Bengaluru')
```

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

✓ 1 row inserted. (Query took 0.0450 seconds.)

```
INSERT INTO `person`(`driver_id`, `name`, `address`) VALUES ('A5','Tokyo','Basvangudi, Bengaluru')
```

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

				driver_id	name	address
<input type="checkbox"/>	Edit	Copy	Delete	A1	Raj	R.T.Nagar, Bengaluru
<input type="checkbox"/>	Edit	Copy	Delete	A2	Raja	R.K.Nagar, Bengaluru
<input type="checkbox"/>	Edit	Copy	Delete	A3	Shash	T.M.Nagar, Bengaluru
<input type="checkbox"/>	Edit	Copy	Delete	A4	Paris	Shivajinagar, Bengaluru
<input type="checkbox"/>	Edit	Copy	Delete	A5	Tokyo	Basvangudi, Bengaluru

☐ Check all
 With selected:
 Edit
 Copy
 Delete
 Export

✓ 1 row inserted. (Query took 0.0890 seconds.)

```
INSERT INTO `car` (`regno`, `model`, `year`) VALUES ('123','A class',2018)
```

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

✓ 1 row inserted. (Query took 0.1160 seconds.)

```
INSERT INTO `car` (`regno`, `model`, `year`) VALUES ('124','B class',2017)
```

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

✓ 1 row inserted. (Query took 0.0370 seconds.)

```
INSERT INTO `car` (`regno`, `model`, `year`) VALUES ('125','C class',2020)
```

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

✓ 1 row inserted. (Query took 0.1090 seconds.)
















```
INSERT INTO `car` (`regno`, `model`, `year`) VALUES ('126','D class',2021)
```

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

✓ 1 row inserted. (Query took 0.0400 seconds.)

```
INSERT INTO `car` (`regno`, `model`, `year`) VALUES ('127','E class',2019)
```

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

<div> <div>↔T↔</div> </div>				regno	model	year
<input type="checkbox"/>	 Edit	 Copy	 Delete	123	A class	2018
<input type="checkbox"/>	 Edit	 Copy	 Delete	124	B class	2017
<input type="checkbox"/>	 Edit	 Copy	 Delete	125	C class	2020
<input type="checkbox"/>	 Edit	 Copy	 Delete	126	D class	2021
<input type="checkbox"/>	 Edit	 Copy	 Delete	127	E class	2019

✓ 1 row inserted. (Query took 0.1400 seconds.)

```
INSERT INTO `accident`(`report_number`, `dateAcc`, `location`) VALUES (1,'2021-01-10','Hebbal')
```

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

✓ 1 row inserted. (Query took 0.0920 seconds.)

```
INSERT INTO `accident`(`report_number`, `dateAcc`, `location`) VALUES (2,'2021-02-19','R.T.Nagar')
```

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

✓ 1 row inserted. (Query took 0.0410 seconds.)

```
INSERT INTO `accident`(`report_number`, `dateAcc`, `location`) VALUES (3,'2021-03-13','Yelahanka')
```

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

✓ 1 row inserted. (Query took 0.0400 seconds.)

```
INSERT INTO `accident`(`report_number`, `dateAcc`, `location`) VALUES (4,'2021-04-01','Basvangudi')
```

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

✓ 1 row inserted. (Query took 0.0770 seconds.)

```
INSERT INTO `accident`(`report_number`, `dateAcc`, `location`) VALUES (5,'2021-04-09','K.R.Puram')
```

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

✓ 1 row inserted. (Query took 0.0560 seconds.)

```
INSERT INTO `accident`(`report_number`, `dateAcc`, `location`) VALUES (12,'2021-01-01','M.G.Road')
```

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

+ Options

				report_number	dateAcc	location
<input type="checkbox"/>	 Edit	 Copy	 Delete	1	2021-01-10	Hebbal
<input type="checkbox"/>	 Edit	 Copy	 Delete	2	2021-02-19	R.T.Nagar
<input type="checkbox"/>	 Edit	 Copy	 Delete	3	2021-03-13	Yelahanka
<input type="checkbox"/>	 Edit	 Copy	 Delete	4	2021-04-01	Basvangudi
<input type="checkbox"/>	 Edit	 Copy	 Delete	5	2021-04-09	K.R.Puram
<input type="checkbox"/>	 Edit	 Copy	 Delete	12	2021-01-01	M.G.Road



☐ Check all

With selected:

 Edit

 Copy

 Delete

 Export

✓ 1 row inserted. (Query took 0.1140 seconds.)

```
INSERT INTO `owns`(`driver_id`, `regno`) VALUES ('A4','126')
```

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

✓ 1 row inserted. (Query took 0.1450 seconds.)

```
INSERT INTO `owns`(`driver_id`, `regno`) VALUES ('A3','124')
```

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

✓ 1 row inserted. (Query took 0.1830 seconds.)

```
INSERT INTO `owns`(`driver_id`, `regno`) VALUES ('A1','127')
```

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

✓ 1 row inserted. (Query took 0.0630 seconds.)

```
INSERT INTO `owns`(`driver_id`, `regno`) VALUES ('A5','123')
```

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

✓ 1 row inserted. (Query took 0.0360 seconds.)

```
INSERT INTO `owns`(`driver_id`, `regno`) VALUES ('A2','125')
```

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

+ Options

driver_id	regno
A4	126
A3	124
A1	127
A5	123
A2	125

✓ 1 row inserted. (Query took 0.0580 seconds.)

```
INSERT INTO `participated`(`driver_id`, `regno`, `report_number`, `damage_amount`) VALUES ('A4','126',2,10000)
```

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

✓ 1 row inserted. (Query took 0.0730 seconds.)

```
INSERT INTO `participated`(`driver_id`, `regno`, `report_number`, `damage_amount`) VALUES ('A3','124',1,15000)
```

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

✓ 1 row inserted. (Query took 0.0680 seconds.)

```
INSERT INTO `participated`(`driver_id`, `regno`, `report_number`, `damage_amount`) VALUES ('A1','127',3,5000)
```

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

✓ 1 row inserted. (Query took 0.0410 seconds.)

```
INSERT INTO `participated`(`driver_id`, `regno`, `report_number`, `damage_amount`) VALUES ('A5','123',4,50000)
```

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

✓ 1 row inserted. (Query took 0.1480 seconds.)

```
INSERT INTO `participated`(`driver_id`, `regno`, `report_number`, `damage_amount`) VALUES ('A2','125',5,19812)
```

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

+ Options

driver_id	regno	report_number	damage_amount
A4	126	2	10000
A3	124	1	15000
A1	127	3	5000
A5	123	4	50000
A2	125	5	19812
A1	127	12	20000

iii. Demonstrate how you

a. Update the damage amount for the car with a specific Regno in the accident with report number 12 to 25000.

✓ 1 row affected. (Query took 0.0710 seconds.)

```
UPDATE participated SET damage_amount=25000 where report_number=12 and regno=127
```

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

+ Options

driver_id	regno	report_number	damage_amount
A4	126	2	10000
A3	124	1	15000
A1	127	3	5000
A5	123	4	50000
A2	125	5	19812
A1	127	12	25000

b) Add a new accident to the database.

✓ 1 row inserted. (Query took 0.1510 seconds.)

```
INSERT INTO `accident`(`report_number`, `dateAcc`, `location`) VALUES (9,'2021-02-02','BEL Road')
```

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

+ Options

				report_number	dateAcc	location
<input type="checkbox"/>	 Edit	 Copy	 Delete	1	2021-01-10	Hebbal
<input type="checkbox"/>	 Edit	 Copy	 Delete	2	2021-02-19	R.T.Nagar
<input type="checkbox"/>	 Edit	 Copy	 Delete	3	2021-03-13	Yelahanka
<input type="checkbox"/>	 Edit	 Copy	 Delete	4	2021-04-01	Basvangudi
<input type="checkbox"/>	 Edit	 Copy	 Delete	5	2021-04-09	K.R.Puram
<input type="checkbox"/>	 Edit	 Copy	 Delete	9	2021-02-02	BEL Road
<input type="checkbox"/>	 Edit	 Copy	 Delete	12	2021-01-01	M.G.Road

↑ ☐ Check all With selected:  Edit  Copy  Delete  Export

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

✓ Showing rows 0 - 0 (1 total, Query took 0.0880 seconds.)

```
select count(distinct driver_id) from participated a, accident b where a.report_number=b.report_number and b.dateAcc like '2021%'
```

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

☐ Show all | Number of rows: 25 ▼ Filter rows:

+ Options

count(distinct driver_id)

5

☐ Show all | Number of rows: 25 ▼ Filter rows:

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

✓ Showing rows 0 - 0 (1 total, Query took 0.0050 seconds.)

```
select count(driver_id) from participated p, car c where p.regno=c.regno and model='E Class'
```

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

☐ Show all | Number of rows: 25 ▼ Filter rows:

+ Options

count(driver_id)

2

☐ Show all | Number of rows: 25 ▼ Filter rows: