

LAB 1:

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)

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

ii. Enter at least five tuples for each relation.

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.

b. Add a new accident to the database.

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

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

The screenshot shows the phpMyAdmin interface for a database named 'insurance'. The left sidebar shows the database structure with tables: accident, car, owns, participated, and person. The main panel displays the 'car' table structure and data. The table has three columns: Regno, Model, and Year. The data rows are:

Regno	Model	Year
KA03R111	Honda City	2020
KA03R112	Duster	2021
KA03R113	Maruti 800	2015
KA03R114	Santro	2010
KA03R115	Mercedes Benz	2003

phpMyAdmin

Recent Favorites

- New
- information_schema
- insurance
 - New
 - accident
 - car
 - owns
 - participated
 - person
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: insurance » Table: owns

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking More

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 4 (5 total, Query took 0.0012 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

+ Options

DRIVERID	REGNO
1	KA03R111
2	KA03R112
3	KA03R113
4	KA03R114
5	KA03R115

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

phpMyAdmin

Recent Favorites

- New
- information_schema
- insurance
 - New
 - accident
 - car
 - owns
 - participated
 - person
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: insurance » Table: participated

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking More

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 5 (6 total, Query took 0.0014 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

+ Options

DRIVERID	REGNO	REPORTNO	DAMAGEAMOUNT
4	KA03MS114	1	30000
2	KA03R112	2	39898
3	KA03R113	3	40000
5	KA03R115	5	50000
2	KA03R113	4	40000
12	KA03R120	12	25000

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

phpMyAdmin

Recent Favorites

- New
- information_schema
- insurance
 - New
 - accident
 - car
 - owns
 - participated
 - person
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: insurance » Table: person

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking More

Showing rows 0 - 4 (5 total, Query took 0.0027 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

				driverid	Name	address
<input type="checkbox"/>	Edit	Copy	Delete	1	Stuart	Yelahanka
<input type="checkbox"/>	Edit	Copy	Delete	2	Ram	Rajajinagar
<input type="checkbox"/>	Edit	Copy	Delete	3	Faizal	Frazer Town
<input type="checkbox"/>	Edit	Copy	Delete	4	Joy	Whitefield
<input type="checkbox"/>	Edit	Copy	Delete	5	Rajesh	Jakkur

Check all With selected: Edit Copy Delete Export

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

phpMyAdmin

Recent Favorites

- New
- information_schema
- insurance
 - New
 - accident
 - car
 - owns
 - participated
 - person
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: insurance » Table: accident

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking More

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 5 (6 total, Query took 0.0018 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

+ Options

REPORTNUMBER	DATE	LOCATION
1	2020-08-08	BEL ROAD
4	2020-10-05	MG ROAD
2	2020-09-20	AIRPORT ROAD
3	2020-09-19	CBI ROAD
5	2020-05-20	UTTARAHALLI MAIN ROAD
6	2003-07-09	RICHMOND ROAD

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

iii. a.

phpMyAdmin

Recent Favorites

- New
- information_schema
- insurance
 - New
 - accident
 - car
 - owns
 - person
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: insurance » Table: participated

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking More

Run SQL query/queries on table insurance.participated:

```

1 UPDATE participated SET DAMAGEAMOUNT=25000 WHERE REPORTNO=12;
2 SELECT * FROM participated;
```

DRIVERID
REGNO
REPORTNO
DAMAGEAMOUNT

SELECT * SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query <<

iii. b.

phpMyAdmin

Recent Favorites

- New
- information_schema
- insurance
 - New
 - accident
 - car
 - owns
 - person
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: insurance » Table: accident

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking More

Run SQL query/queries on table insurance.accident:

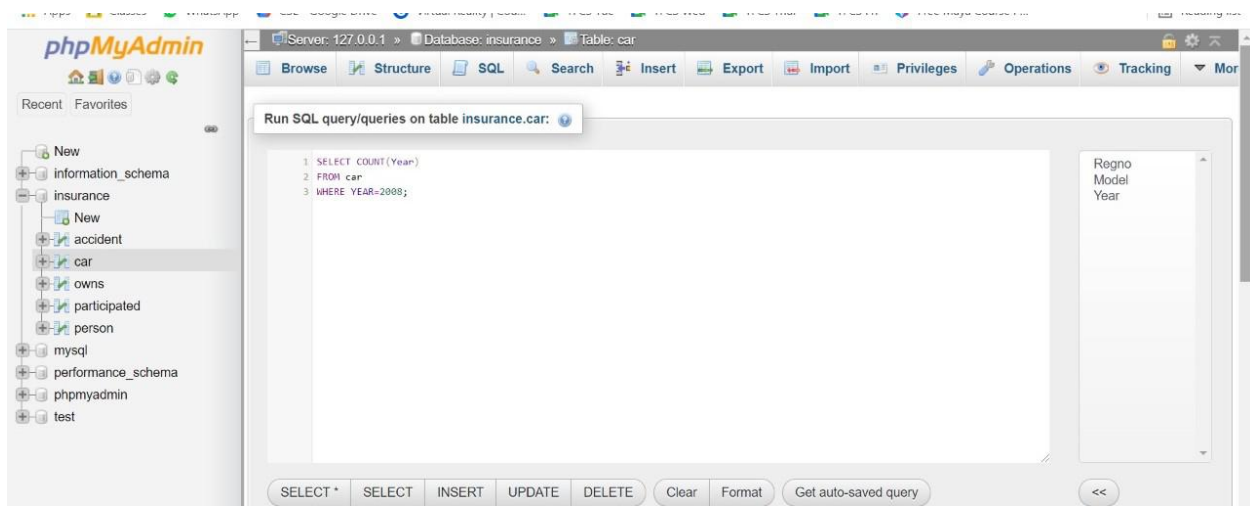
```

1 INSERT INTO accident VALUES(6,'2003-07-09','RICHMOND ROAD');
2 SELECT * FROM accident;
```

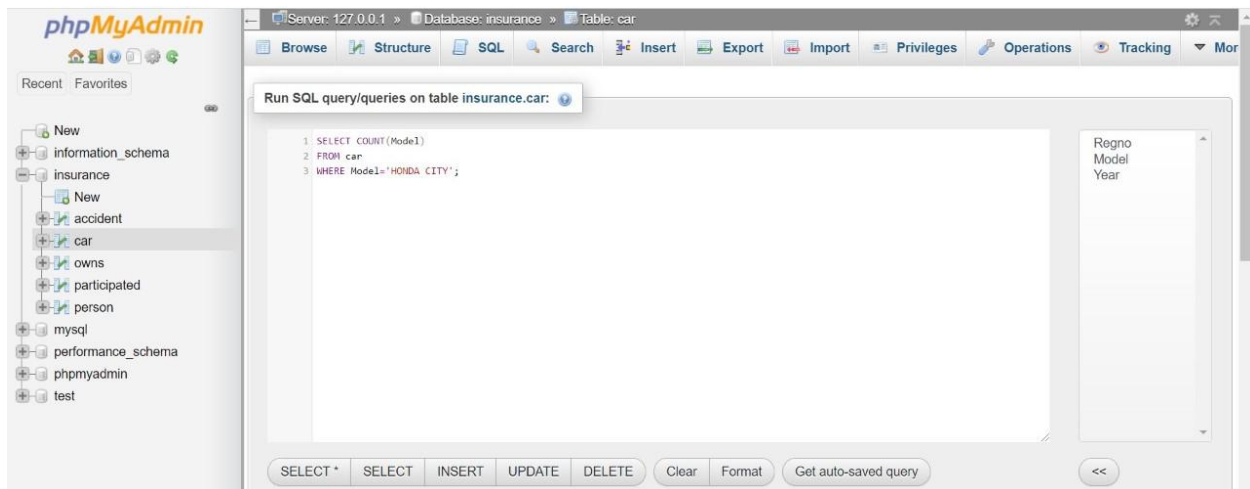
REPORTNUMBER
DATE
LOCATION

SELECT * SELECT INSERT UPDATE DELETE Clear Format Get auto-saved query <<

iv.



v.



PROGRAM 2. BANKING ENTERPRISE DATABASE

Consider the following database for a banking enterprise.

BRANCH (branch-name: String, branch-city: String, assets: real)

ACCOUNTS (accno: int, branch-name: String, balance: real)

DEPOSITOR (customer-name: String, customer-street: String, customer-city: String)

LOAN (loan-number: int, branch-name: String, amount: real)

BORROWER (customer-name: String, loan-number: int)

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

ii. Enter at least five tuples for each relation.

- iii. Find all the customers who have at least two accounts at the Main branch.
- iv. Find all the customers who have an account at all the branches located in a specific city.
- v. Demonstrate how you delete all account tuples at every branch located in a specific city.

phpMyAdmin

Recent Favorites

- New
- banking
 - New
 - accounts
 - borrower
 - branch
 - depositor
 - loan
- information_schema
- insurance
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: banking » Table: accounts

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 4 (5 total, Query took 0.0011 seconds.)

SELECT * FROM 'accounts'

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

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

+ Options

ACCOUNTNUMBER	BRANCHNAME	BALANCE
123	SAHAKARNAGAR	3000
124	JUBILEE HILLS	40000
125	BANSHANKARI	35000
126	CHAMRAJPET	20000
127	BANDRA	600

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

phpMyAdmin

Recent Favorites

- New
- banking
 - New
 - accounts
 - borrower
 - branch
 - depositor
 - loan
- information_schema
- insurance
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: banking » Table: borrower

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 4 (5 total, Query took 0.0011 seconds.)

SELECT * FROM 'borrower'

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

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

+ Options

CUSTOMERNAME	LOANNUMBER
SUNIDHI	1
SHREYA	2
SONU	3
ALKA	4
UDIT	5

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

phpMyAdmin

Recent Favorites

- New
- banking
 - New
 - accounts
 - borrower
 - branch
 - depositor
 - loan
- information_schema
- insurance
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: banking » Table: branch

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

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

SELECT * FROM 'branch'

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

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

+ Options

BRANCHNAME	BRANCHCITY	ASSETS
SAHAKARNAGAR	BENGALURU	300000
JUBILEE HILLS	HYDERABAD	400000
BANSHANKARI	BENGALURU	350000
CHAMRAJPET	HYDERABAD	200000
BANDRA	MUMBAI	600000

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

phpMyAdmin

Recent Favorites

- New
- banking
 - New
 - accounts
 - borrower
 - branch
 - depositor
 - loan
- information_schema
- insurance
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: banking » Table: depositor

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking More

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 4 (5 total, Query took 0.0011 seconds.)

SELECT * FROM `depositor`

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

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

+ Options

CUSTOMERNAME	CUSTOMERSTREET	CUSTOMERCITY
SRISHTI	SAHAKARNAGAR	BENGALURU
SHALINI	JUBILEE HILLS	HYDERABAD
GEORGE	BANSHANKARI	BENGALURU
RAJNI	CHAMRAJPET	HYDERABAD
MOHAN	BANDRA	MUMBAI

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

phpMyAdmin

Recent Favorites

- New
- banking
 - New
 - accounts
 - borrower
 - branch
 - depositor
 - loan
- information_schema
- insurance
- mysql
- performance_schema
- phpmyadmin
- test

Server: 127.0.0.1 » Database: banking » Table: loan

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking More

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 4 (5 total, Query took 0.0018 seconds.)

SELECT * FROM `loan`

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

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

+ Options

LOANNUMBER	BRANCHNAME	AMOUNT
1	SAHAKARNAGAR	2000
2	JUBILEE HILLS	800
3	BANSHANKARI	5000
4	CHAMRAJPET	3000
5	BANDRA	400

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