

```
create database Insurance;
```

```
use Insurance;
```

```
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),  
    yeeer 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, yyear) 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', 'KA031181'),  
( 'A04', 'KA095477'),  
( '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);
```

-- Show all accidents (date and location)

```
select accident_date,location from ACCIDENT;
```

-- Find drivers who caused damage \geq 25000

```
SELECT PERSON.name
```

```
FROM PERSON, PARTICIPATED
WHERE PERSON.driver_id = PARTICIPATED.driver_id
AND PARTICIPATED.damage_amount >= 25000;
```

-- List each driver with the cars they own (one row per ownership)

```
SELECT PERSON.name, CAR.reg_num, CAR.model
FROM PERSON, OWNS, CAR
WHERE PERSON.driver_id = OWNS.driver_id
AND OWNS.reg_num = CAR.reg_num;
```

-- Show accidents and the drivers involved (including damage amount)

```
SELECT
ACCIDENT.report_num, ACCIDENT.accident_date, ACCIDENT.location, PERSON.name
AS driver_name, PARTICIPATED.damage_amount
FROM ACCIDENT, PARTICIPATED, PERSON
WHERE ACCIDENT.report_num = PARTICIPATED.report_num
AND PARTICIPATED.driver_id = PERSON.driver_id
ORDER BY ACCIDENT.report_num;
```

-- Total damage per accident report

```
SELECT report_num, SUM(damage_amount) AS total_damage
FROM PARTICIPATED
GROUP BY report_num
ORDER BY report_num;
```

-- Drivers who were involved in more than one accident

```
SELECT PERSON.name
FROM PERSON, PARTICIPATED
WHERE PERSON.driver_id = PARTICIPATED.driver_id
GROUP BY PERSON.driver_id, PERSON.name
HAVING COUNT(DISTINCT PARTICIPATED.report_num) > 1;
```

-- Cars that never had an accident (owned but not in participated)

```
SELECT CAR.model
FROM CAR
WHERE CAR.reg_num NOT IN (
```

```
SELECT DISTINCT reg_num
FROM PARTICIPATED
);
-- Latest accident (most recent accident_date)
```

```
SELECT *
FROM ACCIDENT
ORDER BY accident_date DESC
LIMIT 1;
```

```
-- Average damage amount per driver
```

```
SELECT PERSON.name,AVG(PARTICIPATED.damage_amount) AS average_damage
FROM PERSON, PARTICIPATED
WHERE PERSON.driver_id = PARTICIPATED.driver_id
GROUP BY PERSON.driver_id, PERSON.name
ORDER BY average_damage DESC;
```

```
-- 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;
```

```
-- Find drivers who caused the maximum damage in any single accident
```

```
SELECT PERSON.name, PARTICIPATED.damage_amount, PARTICIPATED.report_num
FROM PERSON, PARTICIPATED
WHERE PERSON.driver_id = PARTICIPATED.driver_id
AND PARTICIPATED.damage_amount = (
    SELECT MAX(damage_amount)
    FROM PARTICIPATED
);
```

```
-- Show cars (model) involved in accidents with total damage > 20000
```

```
SELECT DISTINCT CAR.model
FROM CAR, PARTICIPATED
WHERE CAR.reg_num = PARTICIPATED.reg_num
AND PARTICIPATED.report_num IN (
    SELECT report_num
    FROM PARTICIPATED
```

```

GROUP BY report_num
HAVING SUM(damage_amount) > 20000
);
-- Create a view summarizing accidents with participants count and total damage
CREATE VIEW AccidentSummary AS
SELECT
    ACCIDENT.report_num,
    ACCIDENT.accident_date,
    ACCIDENT.location,
    COUNT(PARTICIPATED.reg_num) AS participant_count,
    SUM(PARTICIPATED.damage_amount) AS total_damage
FROM ACCIDENT, PARTICIPATED
WHERE ACCIDENT.report_num = PARTICIPATED.report_num
GROUP BY ACCIDENT.report_num, ACCIDENT.accident_date, ACCIDENT.location
ORDER BY ACCIDENT.report_num;

```

```
select * from AccidentSummary;
```

Show all accidents (date and location)

Result Grid			Filter Rows:
	accident_date	location	
▶	2003-01-01	Mysore Road	
	2004-02-02	Southend Circle	
	2003-01-21	Bulltemple Road	
	2008-02-17	Mysore Road	
	2005-03-04	Kanakpura Road	

Find drivers who caused damage ≥ 25000

	name
▶	Pradeep
	Smith

List each driver with the cars they own (one row per ownership)

	name	reg_num	model
▶	Richard	KA052250	Indica
	Pradeep	KA053408	Honda
	Smith	KA031181	Lancer
	Venu	KA095477	Toyota
	John	KA041702	Audi

Show accidents and the drivers involved (including damage amount)

	report_num	accident_date	location	driver_name	damage_amount
▶	11	2003-01-01	Mysore Road	Richard	10000
	12	2004-02-02	Southend Circle	Pradeep	50000
	13	2003-01-21	Bulltemple Road	Smith	25000
	14	2008-02-17	Mysore Road	Venu	3000
	15	2005-03-04	Kanakpura Road	John	5000

Total damage per accident report

	report_num	total_damage
▶	11	10000
	12	50000
	13	25000
	14	3000
	15	5000

Latest accident (most recent accident_date)

	report_num	accident_date	location
▶	14	2008-02-17	Mysore Road
*	NULL	NULL	NULL



Average damage amount per driver

	name	average_damage
▶	Pradeep	50000.0000
	Smith	25000.0000
	Richard	10000.0000
	John	5000.0000
	Venu	3000.0000

Average damage amount per driver

	name	average_damage
▶	Pradeep	50000.0000
	Smith	25000.0000
	Richard	10000.0000
	John	5000.0000
	Venu	3000.0000

Find drivers who caused the maximum damage in any single accident

Result Grid   Filter Rows: <input type="text"/>			
	name	damage_amount	report_num
▶	Pradeep	50000	12

Show cars (model) involved in accidents with total damage > 20000

	model
▶	Indica
	Honda
	Toyota

Create a view summarizing accidents with participants count and total damage

	report_num	accident_date	location	participant_count	total_damage
▶	11	2003-01-01	Mysore Road	1	25000
	12	2004-02-02	Southend Circle	1	50000
	13	2003-01-21	Bulltemple Road	1	25000
	14	2008-02-17	Mysore Road	1	3000
	15	2005-03-04	Kanakpura Road	1	5000