

```
CREATE DATABASE Insurance;
```

```
USE Insurance;
```

```
CREATE TABLE person (  
    driver_id VARCHAR(10) PRIMARY KEY,  
    name VARCHAR(50),  
    address VARCHAR(100)  
);
```

```
CREATE TABLE car (  
    reg_num VARCHAR(10) PRIMARY KEY,  
    model VARCHAR(30),  
    year INT  
);
```

```
CREATE TABLE accident (  
    report_num INT PRIMARY KEY,  
    accident_date DATE,  
    location VARCHAR(50)  
);
```

```
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, report_num, reg_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 VALUES
('A01', 'Richard', 'Srinivasa Nagar'),
('A02', 'Pradeep', 'Rajaji Nagar'),
('A03', 'Smith', 'Ashok Nagar'),
('A04', 'Venu', 'N R Colony'),
('A05', 'John', 'Hanumanth Nagar'),
('A06', 'Vinayak', 'Bidar');
```

```
INSERT INTO car VALUES
('KA052250', 'Indiaca', 1990),
('KA053326', 'Lancer', 1975),
('KA035569', 'Toyota', 1998),
('KA025568', 'Honda', 2008),
('KA025569', 'Audi', 2005);
```

INSERT INTO accident VALUES

(11, '2003-01-01', 'Mysore Road'),
(12, '2004-02-02', 'Southend Circle'),
(13, '2003-01-21', 'Bull Temple'),
(14, '2008-02-17', 'Mysore Road'),
(15, '2005-03-04', 'Kanyakumari'),
(16, '2015-03-08', 'Domlur');

INSERT INTO owns VALUES

('A01', 'KA052250'),
('A02', 'KA053326'),
('A03', 'KA035569'),
('A04', 'KA025568'),
('A05', 'KA025569');

INSERT INTO participated VALUES

('A01', 'KA052250', 11, 10000),
('A02', 'KA053326', 12, 25000),
('A03', 'KA035569', 13, 50000),
('A04', 'KA025568', 14, 30000),
('A05', 'KA025569', 15, 5000);

SELECT * FROM person;

| Result Grid | | | |
|--------------|-----------|---------|-----------------|
| Filter Rows: | | | |
| | driver_id | name | address |
| ▶ | A01 | Richard | Srinivasa Nagar |
| | A02 | Pradeep | Rajaji Nagar |
| | A03 | Smith | Ashok Nagar |
| | A04 | Venu | N R Colony |
| | A05 | John | Hanumanth Nagar |
| | A06 | Vinayak | Bidar |
| * | NULL | NULL | NULL |

SELECT * FROM car;

| Result Grid | | | |
|--------------|-----------|---------|------|
| Filter Rows: | | | |
| | reg_num | model | year |
| ▶ | KA025568 | Honda | 2008 |
| | KA025569 | Audi | 2005 |
| | KA0311841 | Lancer | 1975 |
| | KA035569 | Toyota | 1998 |
| | KA041720 | Audi | 2005 |
| | KA052250 | Indiaca | 1990 |
| | KA053108 | Honda | 2008 |
| | KA053326 | Lancer | 1975 |
| | KA058850 | Indiaca | 1990 |
| | KA095477 | Toyota | 1998 |
| * | NULL | NULL | NULL |

SELECT * FROM accident;

| Result Grid | | | |
|--------------|------------|---------------|-----------------|
| Filter Rows: | | | |
| | report_num | accident_date | location |
| ▶ | 11 | 2003-01-01 | Mysore Road |
| | 12 | 2004-02-02 | Southend Circle |
| | 13 | 2003-01-21 | Bull Temple |
| | 14 | 2008-02-17 | Mysore Road |
| | 15 | 2005-03-04 | Kanyakumari |
| | 16 | 2015-03-08 | Domlur |
| * | NULL | NULL | NULL |

SELECT * FROM owns;

SELECT * FROM participated;

| Result Grid | | | | |
|--------------|-----------|----------|------------|---------------|
| Filter Rows: | | | | |
| | driver_id | reg_num | report_num | damage_amount |
| ▶ | A01 | KA052250 | 11 | 10000 |
| | A02 | KA053326 | 12 | 25000 |
| | A03 | KA035569 | 13 | 50000 |
| | A04 | KA025568 | 14 | 30000 |
| | A05 | KA025569 | 15 | 5000 |
| * | NULL | NULL | NULL | NULL |

UPDATE participated

SET damage_amount = 5000

WHERE reg_num = 'KA053326' AND report_num = 12;

| Result Grid | | | | |
|--------------|-----------|----------|------------|---------------|
| Filter Rows: | | | | |
| | driver_id | reg_num | report_num | damage_amount |
| ▶ | A01 | KA052250 | 11 | 10000 |
| | A02 | KA053326 | 12 | 5000 |
| | A03 | KA035569 | 13 | 50000 |
| | A04 | KA025568 | 14 | 30000 |
| | A05 | KA025569 | 15 | 5000 |
| * | NULL | NULL | NULL | NULL |

SELECT * FROM car ORDER BY year ASC;

| Result Grid | | | |
|--------------|-----------|---------|------|
| Filter Rows: | | | |
| | reg_num | model | year |
| ▶ | KA0311841 | Lancer | 1975 |
| | KA053326 | Lancer | 1975 |
| | KA052250 | Indiaca | 1990 |
| | KA058850 | Indiaca | 1990 |
| | KA035569 | Toyota | 1998 |
| | KA095477 | Toyota | 1998 |
| | KA025569 | Audi | 2005 |
| | KA041720 | Audi | 2005 |
| | KA025568 | Honda | 2008 |
| | KA053108 | Honda | 2008 |
| * | NULL | NULL | NULL |

SELECT COUNT(DISTINCT p.report_num) AS cnt

FROM car c

JOIN participated p ON c.reg_num = p.reg_num

WHERE c.model = 'Lancer';

| Result Grid | |
|-------------|-----|
| | cnt |
| ▶ | 1 |

SELECT COUNT(DISTINCT p.driver_id) AS cnt

FROM participated p

JOIN accident a ON p.report_num = a.report_num

WHERE YEAR(a.accident_date) = 2008;

| Result Grid | |
|-------------|-----|
| | cnt |
| ▶ | 1 |

SELECT accident_date, location FROM accident;

| Result Grid | | Filter Rows: |
|-------------|---------------|-----------------|
| | accident_date | location |
| ▶ | 2003-01-01 | Mysore Road |
| | 2004-02-02 | Southend Circle |
| | 2003-01-21 | Bull Temple |
| | 2008-02-17 | Mysore Road |
| | 2005-03-04 | Kanyakumari |
| | 2015-03-08 | Domlur |

SELECT DISTINCT driver_id, damage_amount

FROM participated

WHERE damage_amount >= 25000;

| Result Grid | | Filter Rows: |
|-------------|-----------|---------------|
| | driver_id | damage_amount |
| ▶ | A02 | 25000 |
| | A03 | 50000 |
| | A04 | 30000 |

SELECT p.*, c.*

FROM person p

JOIN owns o ON p.driver_id = o.driver_id



JOIN car c ON o.reg_num = c.reg_num;

| | driver_id | name | address | reg_num | model | year |
|--|-----------|------|---------|---------|-------|------|
|--|-----------|------|---------|---------|-------|------|

SELECT a.report_num, a.accident_date, a.location, p.driver_id, p.damage_amount

FROM accident a

JOIN participated p ON a.report_num = p.report_num;

| Result Grid | |  Filter Rows: | Export:  | | Wrap Cell Co |
|-------------|------------|--|---|-----------|---------------|
| | report_num | accident_date | location | driver_id | damage_amount |
| ▶ | 11 | 2003-01-01 | Mysore Road | A01 | 10000 |
| | 12 | 2004-02-02 | Southend Circle | A02 | 25000 |
| | 13 | 2003-01-21 | Bull Temple | A03 | 50000 |
| | 14 | 2008-02-17 | Mysore Road | A04 | 30000 |
| | 15 | 2005-03-04 | Kanyakumari | A05 | 5000 |

SELECT report_num, SUM(damage_amount) AS total_damage

FROM participated

GROUP BY report_num;

| Result Grid | | Filter Rows: |
|-------------|------------|--------------|
| | report_num | total_damage |
| ▶ | 11 | 10000 |
| | 12 | 25000 |
| | 13 | 50000 |
| | 14 | 30000 |
| | 15 | 5000 |

```

SELECT driver_id, COUNT(DISTINCT report_num) AS accident_count
FROM participated
GROUP BY driver_id
HAVING COUNT(DISTINCT report_num) > 1;

```

```

SELECT c.reg_num, c.model
FROM car c
LEFT JOIN participated p ON c.reg_num = p.reg_num
WHERE p.reg_num IS NULL;

```

| Result Grid | | |
|-------------|-----------|---------|
| | reg_num | model |
| ▶ | KA0311841 | Lancer |
| | KA041720 | Audi |
| | KA053108 | Honda |
| | KA058850 | Indiaca |
| | KA095477 | Toyota |

```

SELECT * FROM accident ORDER BY accident_date DESC LIMIT 1;

```

| Result Grid | | | |
|-------------|------------|---------------|----------|
| | report_num | accident_date | location |
| ▶ | 16 | 2015-03-08 | Domlur |
| * | NULL | NULL | NULL |

```

SELECT driver_id, AVG(damage_amount) AS avg_damage
FROM participated
GROUP BY driver_id;

```


| Result Grid | | | Filter Rows: |
|-------------|-----------|------------|--------------|
| | driver_id | avg_damage | |
| ▶ | A01 | 10000.0000 | |
| | A02 | 25000.0000 | |
| | A03 | 50000.0000 | |
| | A04 | 30000.0000 | |
| | A05 | 5000.0000 | |

```
SELECT driver_id, damage_amount
FROM participated
ORDER BY damage_amount DESC
LIMIT 1;
```

| Result Grid | | | Filter Rows: |
|-------------|-----------|---------------|--------------|
| | driver_id | damage_amount | |
| ▶ | A03 | 50000 | |

```
SELECT c.model, p.damage_amount
FROM car c
JOIN participated p ON c.reg_num = p.reg_num
WHERE p.damage_amount > 20000;
```

| Result Grid | | | Filter Rows: |
|-------------|--------|---------------|--------------|
| | model | damage_amount | |
| ▶ | Lancer | 25000 | |
| | Toyota | 50000 | |
| | Honda | 30000 | |




```
CREATE VIEW acci_summary2 AS
SELECT
    a.report_num,
```

```

COUNT(p.driver_id) AS participant_count,
SUM(p.damage_amount) AS total_damage
FROM accident a
JOIN participated p ON a.report_num = p.report_num
GROUP BY a.report_num;

```

```
SELECT * FROM acci_summary2;
```

| Result Grid   Filter Rows: <input type="text"/>  | | | |
|---|------------|-------------------|--------------|
| | report_num | participant_count | total_damage |
| ▶ | 11 | 1 | 10000 |
| | 12 | 1 | 25000 |
| | 13 | 1 | 50000 |
| | 14 | 1 | 30000 |
| | 15 | 1 | 5000 |