1. **How many of the accidents in California were in rainy weather?**

   CREATE VIEW incidentsWithStates AS SELECT i.idincidentnum idincidentnum, i.date date, i.time time, i.reportkey reportkey, i.narrative narrative, c.name county_name, s.name state_name, w.name = weather_condition FROM incidents i JOIN county c ON i.county_name = c.name JOIN state s ON c.state_code = s.code JOIN weather_condition w ON i.weather_condition_id = w.id
   SELECT COUNT(*) FROM incidentsWithStates WHERE state_name='CALIFORNIA' && weather_condition='Rain' >> 817

2. **Where was the accident with the oldest driver and what is the gender of the driver?**

```
CREATE VIEW incidentsWithTypes AS
SELECT i.idincidentnum idincidentnum,
i.reportkey reportkey,
t.name,
v.value,
i.user_gender,
c.name county_name,
s.name state_name,
i.date date,
i.time time
FROM incidents i
    JOIN incident2value v on i.reportkey = v.reportkey && i.idincidentnum = v.idincidentnum
    JOIN incidentTypeName t ON t.id = v.typeid
    JOIN county c ON i.county_name = c.name
    JOIN state s ON c.state_code = s.code
```

   SELECT state_name, user_gender, value FROM incidentsWithTypes WHERE name='user_age' order by value DESC limit 1 >> ALABAMA , MALE, 99

3. **Calculate the average damage cost in accidents by grouping them according to states.**

   SELECT AVG(value), state_name from incidentsWithTypes where name = 'damage_cost' GROUP BY state_name

4. **When was the last accident in the states with the most accidents?**

```
SELECT idincidentnum, reportkey, state_name, date
from incidentsWithStates where state_name = (SELECT
state_name From incidentsWithStates
GROUP BY state_name
ORDER BY count(idincidentnum) DESC LIMIT 1) ORDER
BY date DESC LIMIT 1
```

5. **Which state had the most accidents after 2007?**

SELECT COUNT(*), state_name from incidentsWithStates WHERE YEAR(date) > 2007 ORDER BY count(*) DESC LIMIT 1

6. **Show the total number of deaths in accidents by grouping them by years.**

SELECT sum(value), YEAR(date) from incidentsWithTypes where name = "killed" GROUP BY year(date) DESC;

7. **Show the number of casualties in accidents with the lowest and highest train speed.**

```
CREATE PROCEDURE `LowTrainSpeedKilled`() NOT DETERMINISTIC CONTAINS SQL SQL SECURITY DEFINER SELECT value FROM incidentsWithTypes where name = 'killed' && idincidentnum = (SELECT idincidentnum FROM incidentsWithTypes WHERE name = 'train_speed' ORDER BY value ASC LIMIT 1)
```

```
CREATE PROCEDURE `HighestTrainSpeedKilled`() NOT DETERMINISTIC CONTAINS SQL SQL SECURITY DEFINER SELECT value FROM incidentsWithTypes where name = 'killed' && idincidentnum = (SELECT idincidentnum FROM incidentsWithTypes WHERE name = 'train_speed' ORDER BY value DESC LIMIT 1)
```

8. **What is the report code of the accident with the lowest air temperature?**

SELECT reportkey FROM incidentsWithTypes WHERE name='temperature' ORDER BY value ASC LIMIT 1

9. **In which visibility situation did the accident occur the most between 2015-2020?**

```
SELECT visibility.name, count(*) as total FROM incidents join visibility WHERE YEAR(incidents.date) BETWEEN 2015 AND 2020 group by visibility.name order by total DESC limit 1
```

10. **What is the information of the first five accidents of the railway company with the most accidents?**

SELECT * FROM incidentsWithRailRoad WHERE railroad_code = (SELECT railroad_code FROM incidentsWithRailRoad GROUP BY railroad_code ORDER BY count(*) DESC LIMIT 1) ORDER BY date DESC LIMIT 5