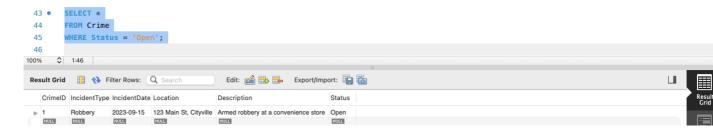
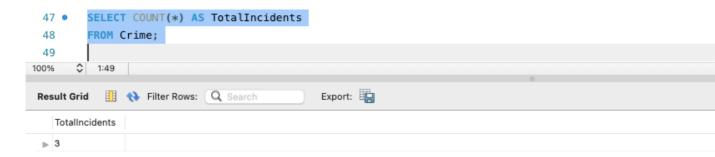
Coding Challenge: 3 Crime Management Schema DDL and DML

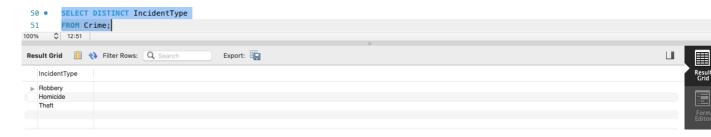
1. Select all open incidents.



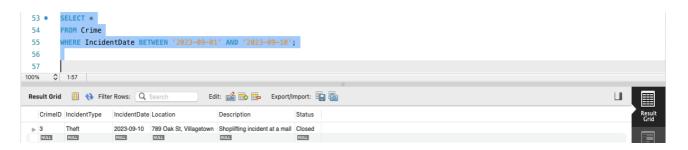
2. Find the total number of incidents.



3. List all unique incident types.



4. Retrieve incidents that occurred between '2023-09-01' and '2023-09-10'.



5. List persons involved in incidents in descending order of age.

```
57 • SELECT Name, TIMESTAMPDIFF(YEAR, Birthdate, CURDATE()) AS Age
58 FROM Victim
59 ORDER BY Age DESC;

100% $ 19:59
```

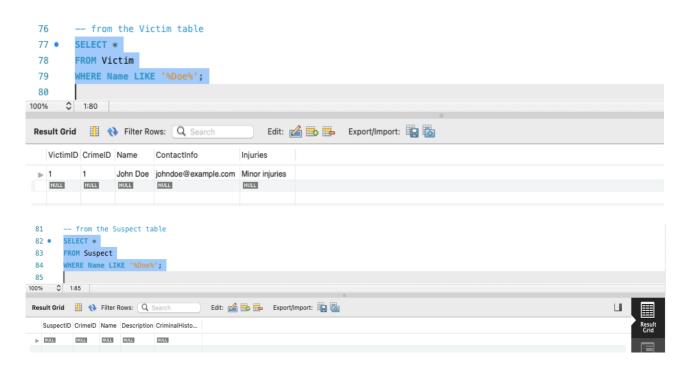
6. Find the average age of persons involved in incidents.

```
SELECT AVG(TIMESTAMPDIFF(YEAR, Birthdate, CURDATE())) AS AverageAge
FROM Victim;
```

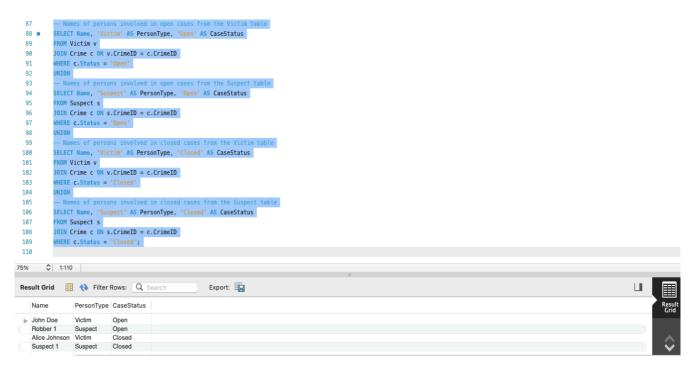
7. List incident types and their counts, only for open cases.



8. Find persons with names containing 'Doe'.



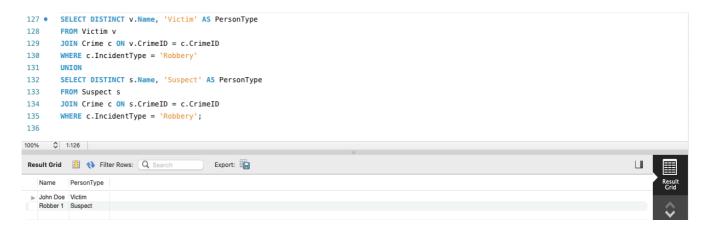
9. Retrieve the names of persons involved in open cases and closed cases.



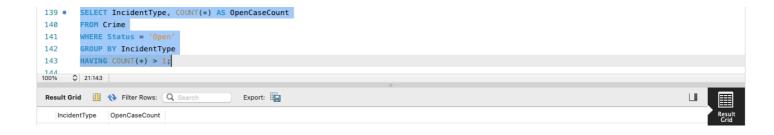
10. List incident types where there are persons aged 30 or 35 involved.

```
112
           Assuming the Victim table has a Birthdate column
113 •
        SELECT DISTINCT c.IncidentType
114
        ROM Crime c
        JOIN Victim v ON c.CrimeID = v.CrimeID
115
        WHERE TIMESTAMPDIFF(YEAR, v.Birthdate, CURDATE()) IN (30, 35);
116
117
118
119 •
        SELECT DISTINCT c.IncidentType
        FROM Crime c
120
        JOIN Suspect s ON c.CrimeID = s.CrimeID
121
        WHERE TIMESTAMPDIFF(YEAR, s.Birthdate, CURDATE()) IN (30, 35);
122
```

11. Find persons involved in incidents of the same type as 'Robbery'.



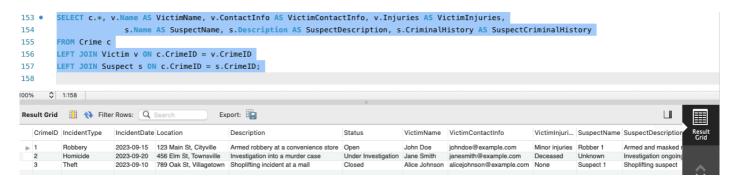
12. List incident types with more than one open case.



13. List all incidents with suspects whose names also appear as victims in other incidents.



14. Retrieve all incidents along with victim and suspect details.



15. Find incidents where the suspect is older than any victim.

```
160 • SELECT c.*, s.Name AS SuspectName, v.Name AS VictimName

161 FROM Crime c

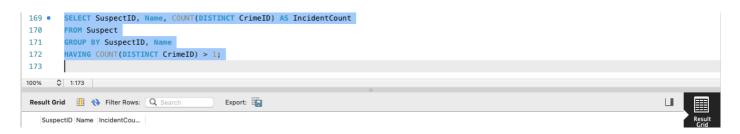
162 JOIN Suspect s ON c.CrimeID = s.CrimeID

163 JOIN Victim v ON c.CrimeID = v.CrimeID

164 WHERE TIMESTAMPDIFF(YEAR, s.Birthdate, CURDATE()) > (SELECT MAX(TIMESTAMPDIFF(YEAR, Birthdate, CURDATE())) FROM Victim WHERE CrimeID = c.CrimeID);

165
```

16. Find suspects involved in multiple incidents.



17. List incidents with no suspects involved.



18. List all cases where at least one incident is of type 'Homicide' and all other incidents are of type 'Robbery'.

```
SELECT DISTINCT c1.*
181 •
182
        FROM Crime c1
         JOIN Crime c2 ON c1.CrimeID = c2.CrimeID
        WHERE c1.IncidentType = 'Homicide' AND c2.IncidentType = 'Robbery'
184
185 — AND NOT EXISTS (
186
              SELECT 1
187
              FROM Crime c3
              WHERE c3.CrimeID = c1.CrimeID
188
189
                AND c3.IncidentType <> 'Homicide'
190
Result Grid 🏥 🚷 Filter Rows: Q Search
  CrimeID | IncidentType | IncidentDate | Location | Description | Status
```

19. Retrieve a list of all incidents and the associated suspects, showing suspects for each incident, or 'No Suspect' if there are none.



20. List all suspects who have been involved in incidents with incident types 'Robbery' or 'Assault'

