## Assignemnt 4: Relational4

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1 How many attorneys in the system?

```
sqlite> SELECT count (distinct name)
...> From attorneys;
41557
```

Figure 1: Number of Attorneys

2 How many "charges" involve "PHONES"?

```
sqlite> SELECT count(case_id)
    ...> FROM charges
    ...> WHERE description LIKE '%PHONE%';
9273
```

Figure 2: Charges Involving '%PHONE%'

3 Count the number of cases related to reckless endangerment (involve "RECKLESS") in each county

```
sqlite> SELECT C.violation_county, count(H.case_id)
    ...> FROM cases AS C, charges as H
    ...> WHERE H.case_id = C.case_id and H.description LIKE '%RECKLESS%' and C.violation_county <> ''
    ...> GROUP BY C.violation_county
    ...> ORDER BY count(H.case_id) DESC, C.violation_county ASC
    ...> LIMIT 3;
Anne Arundel County|762
PRINCE GEORGE'S COUNTY (HYATTSVILLE)|366
PRINCE GEORGE'S COUNTY (UPPER MARLBORO)|311
```

Figure 3: Cases related to reckless endangerment

4 Find the set of "cases" filed in the 1950s

```
sqlite> SELECT case_id, filing_date
    ...> FROM cases
    ...> WHERE filing_date BETWEEN date('1950-01-01') AND date('1959-12-31')
    ...> ORDER BY filing_date ASC
    ...> LIMIT 3;
01C50005265|1950-05-19
06C50008310|1950-06-28
24D51297643|1951-10-24
```

Figure 4: Cases files in 1950s

5 In which decades did the most cases get filed?

```
sqlite> SELECT count(case_id), cast(strftime('%Y', filing_date)/10 AS TEXT) || '0s'
    ...> FROM cases
    ...> WHERE strftime('%Y', filing_date) <> ''
    ...> GROUP BY strftime('%Y', filing_date)/10
    ...> ORDER BY count(case_id) DESC
    ...> LIMIT 3;
622830|2000s
418377|2010s
132192|1990s
```

Figure 5: Decades with most cases filed

6 What percentage of cases were closed for "statistical reasons"?

```
sqlite> SELECT closed_statistically.closed*100.0/count(case_id)
    ...> FROM cases, (
    ...> SELECT count(case_id) as closed
    ...> FROM cases
    ...> WHERE status = 'Case Closed Statistically'
    ...> ) AS closed_statistically;
1.83013383128541
```

Figure 6: Cases closed due to statistical reasons

7 Find the top three "parties" who have been charged in the most number of distinct counties

```
sqlite> SELECT P.name, count(distinct C.violation_county)
    ...> FROM parties as P, cases as C
    ...> WHERE P.case_id = C.case_id and P.name <> '' and P.type = 'Defendant'
    ...> GROUP BY P.name
    ...> ORDER BY count(distinct C.violation_county) DESC
    ...> LIMIT 3;
BUTLER, ROBERT LEE|5
ROBINSON, TIARA MONET|5
AGAMBAR,_WILLIAM DOUGLAS|4
```

Figure 7: top three charged parties with most number of distinct counties