

The Wicked Roadrunners

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CheckPoint 1- Relational Analytics

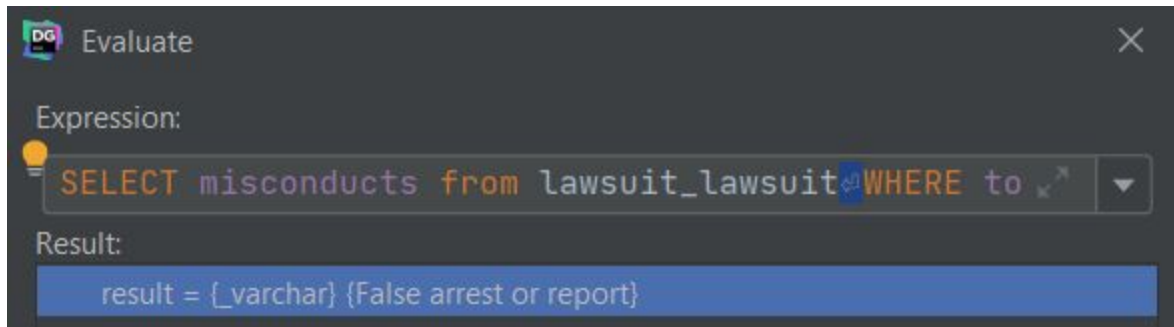
For the first checkpoint, we have tried to answer some of the questions. Some of the questions that we tried to answer were related to disciplinary actions and settlements over violations. We tried to answer questions like what is the most common offense that leads to discipline? We also wanted to know what was the most common offense that leads to a settlement? We were also curious to know whether a police officer was made to change their unit based on the cops that did or did not face disciplinary actions. Hence we found what was the average number of unit changes over a total career for disciplined vs. not disciplined cops. Also, we were interested in knowing what was the disciplinary action that officers received the most. With the first check-point, we were able to get a better insight on how the police department works and handles misconduct.

1. What is the most common offense that leads to discipline?



We were interested in which misconducts most commonly lead to discipline because it may provide direction to how police departments handle different allegations. If a certain misconduct never leads to discipline, that would suggest either (1) it doesn't happen frequently or (2) it isn't taken seriously by the Chicago police department. On the flip side, if a certain misconduct often leads to discipline (e.g. Operation/Personal Violations), it suggests that (1) this violation happens frequently or (2) it is taken more seriously by the Chicago police department. In the first case, if Operations/Personal Violations happen frequently, that would suggest the police department needs to better train or enforce operation procedures (e.g. what misuse of department equipment entails, punishment for insubordination). In the second case, if Operation/Personal Violations are the most disciplined, why are other misconducts not disciplined as much? This question also opens up further research questions. For instance, even if Operation/Personal Violations are the most disciplined, how severe is the discipline? (e.g. reprimand, 1-day suspension). Also, how likely is a cop to repeat this misconduct? What are the discipline rates for each category as opposed to the total collection of allegations?

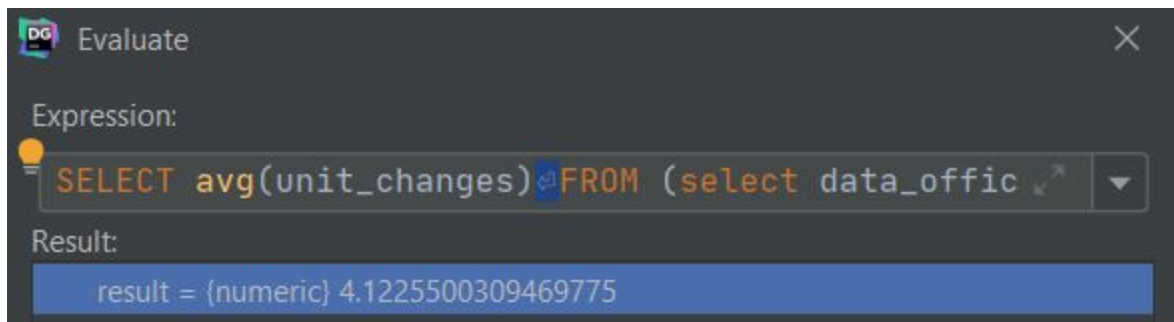
2. What is the most common offense that leads to settlement?



The screenshot shows a Databricks Evaluate window with a dark theme. At the top, it says "Evaluate" with a close button. Below, the "Expression:" field contains the SQL query: `SELECT misconducts from lawsuit_lawsuit WHERE to`. The "Result:" field shows: `result = [_varchar] {False arrest or report}`.

The most common offense that leads to settlements is false arrests and reports as seen above. This may not be surprising since it's easier to prove through documentation and is one of the more severe offenses. One thing to note is that our query treats combinations of misconducts as separate, which means that lawsuits labeled as "false arrest and report" and "excessive force, false arrest" are counted separately. This means that there may be other common offenses that seem rare since it may be accused with other forms of misconduct. It may be valuable to look into these combinations to see if there's a better means of representing these multiple accusation cases. It also would be interesting to look into any offenses that tend to be most likely to be paired together but that is out of the scope of our theme.

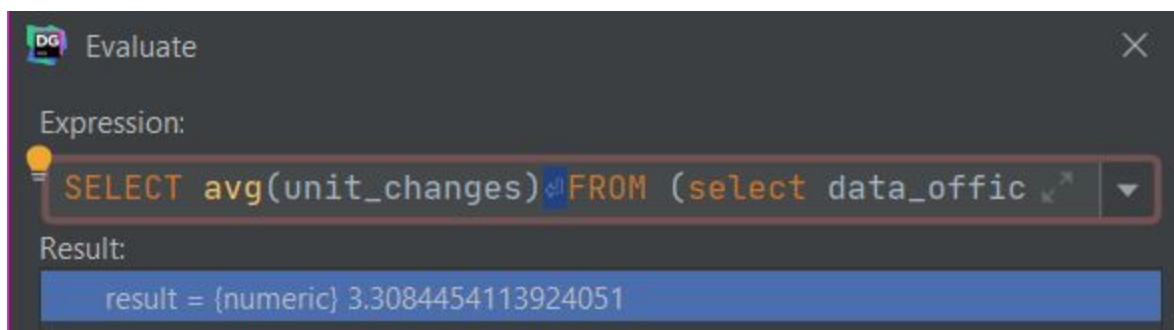
3. What is the average number of unit changes over a total career for disciplined vs. not disciplined cops?



The screenshot shows a Databricks Evaluate window. The "Expression:" field contains the SQL query: `SELECT avg(unit_changes) FROM (select data_offic`. The "Result:" field shows: `result = {numeric} 4.1225500309469775`.

Disciplined:

The average number of unit changes for the entirety of the career for cops who faced disciplinary actions was about 4 (round-off) times.



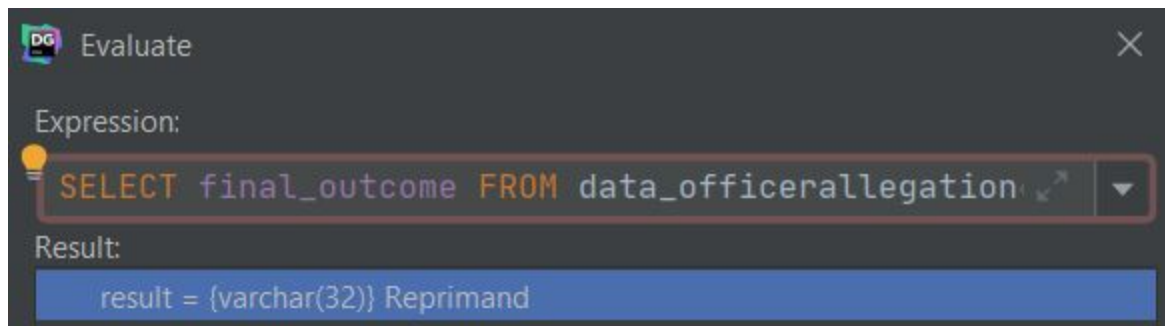
The screenshot shows a Databricks Evaluate window. The "Expression:" field contains the SQL query: `SELECT avg(unit_changes) FROM (select data_offic`. The "Result:" field shows: `result = {numeric} 3.3084454113924051`.

Never disciplined:

The average number of unit changes for the entirety of the career for cops who did not face disciplinary actions was about 3 (round-off) times.

Through these queries, we found that cops that were disciplined on average changed units more often. This result i.e. the comparison of unit changes for cops that did face disciplinary actions vs the cops that did not face disciplinary action, was pretty intuitive, and confirmed through our queries on the data. We suspected that police officers that receive complaints would change between units more often due to their behavior. Regardless, it helped us understand the number of times the unit transitions actually happened.

4. What is the type of discipline that officers receive the most?



The discipline that officers receive the most is that they get reprimanded. Most of the time, instead of facing an internal or external investigation, cops walk off with a written or a verbal warning. This was not a surprise as reprimanding is often known as the "Blue Wall" or the "Code of Silence", where the cops get away with different kinds of violations or brutality without facing charges. This helped us understand how much protection the cops have, which we had read about in the media, but now we could also support this with data.