Project Part I

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Domain Description

The domain that we intend to create revolves around the crimes in Portland Oregon and the police records related to such. This would include information on police involved and shift information. Our goal with this database is to find possible trends in both criminal activity in and around the Portland area, as well as to audit policing behavior by identifying any possible links to predict possible police violence towards civilians. We plan on making entities around civilian and police involvement, as well as different types of crimes committed. Other entities we will use are areas such as location, time, injury type, shift length, ethnicity, gender, age, etc.

Data Source

The source for this data is the Portland.gov website, and we will be using data from the PPB Open Data page. The City of Portland supplies multiple tables of data relating to police department statistics and policing activities by year.
Portland Police Bureau Open Data - https://www.portland.gov/police/open-data

Possible foreign keys

Officer id, time/date, case-id, location.

Ingestion Method

We will be using numpy in python3 in order to pull all data from each .csv and its column names into a postgresql database. They will be imported into separate tables based on specific information such as police on/off duty, overtime, type of crimes, neighborhoods/zip codes, dispatch information (number of officers, EMS/Fire?). From there, we will start to create our relational database and put links together after creating our primary and foreign keys.

Questions

1. What is the greatest number of shootings in any month?
2. What is the least committed crime?
3. Show the average age of officers that have used force.
4. What are the shootings with the fewest number of casings recovered?
5. Are there any use of force incidents where the suspect did not resist?
6. What is the range of the number of uses of force for all officers?
7. What race was each officer and subject in each incident?
8. What is the safest neighborhood, according to the number of incidents?
9. What is the most victimized business?
10. What is the time of month with the most criminal activity?
    a. Time of day with the most criminal activity?
11. Show all crimes involving firearms.
12. What neighborhood has the most police brutality?
13. What district has the most fatalities?
    a. Neighborhood has the most fatalities?
    b. Zip Code has the most fatalities?
14. List all officer on-the-job injuries.
15. Show all crimes by race.
    a. Highest committed crime by race.
16. Get the number of crimes committed by each gender.
17. Show crimes committed by each age group.
18. How does the amount of police brutality differ between officers on overtime vs on regular time?
19. Show all deaths related to police activities.
20. How many tenured officers used force in police incidents?
    a. Tenured officers did not use force in police incidents?
21. How many suspect fatalities involved officer injuries?
22. How many calls were made related to disorders?
    a. How many ended up using deadly force?