Instructions For Chicago Crime Assignment

Source: Skills Network

As a hands on Assignment, you will be working on a real world dataset provided by the Chicago Data Portal. Imagine, you have been hired by a non-profit organization that strives to improve educational outcomes for children and youth in the City of Chicago. Your job is to analyze the census, crime, and school data for a given neighbourhood or district. You will identify causes that impact the enrolment, safety, health, environment ratings of schools.

You will he asked questions that will help you understand the data just like a data analyst or data scientist would. You will be assessed both on the correctness of your SQL

This assignment involves 3 datasets for the city of Chicago obtained from the Chicago Data Portal:

1. Chicago Socioeconomic Indicators

This dataset contains a selection of six socioeconomic indicators of public health significance and a *hardship index,* by Chicago community area, for the years 2008 -2012.

2. Chicago Public Schools

This dataset shows all school level performance data used to create CPS School Report Cards for the 2011-2012 school year.

3. Chicago Crime Data

This dataset reflects reported incidents of crime (with the exception of murders where data exists for each victim) that occurred in the City of Chicago from 2001 to present, minus the most recent seven days.

Instructions:

1. Review the datasets

Before you begin, you will need to become familiar with the datasets. Snapshots for the three datasets in .CSV format can be downloaded from the following links:

- Chicago Socioeconomic Indicators: Click here

- Chicago Public Schools: Click here

- Chicago Crime Data: Click here

3. Write and execute queries

Compose and execute the appropriate SQL queries to answer each of the problems.

Problem 1: Find the total number of crimes recorded in the CRIME table.

Problem 2: List community areas with per capita income less than 11000.

Problem 3: List all case numbers for crimes involving minors?

Problem 4: List all kidnapping crimes involving a child?(children are not considered minors for the purposes of crime analysis)

Problem 5: What kind of crimes were recorded at schools?

Problem 6: List the average safety score for all types of schools.

Problem 7: List 5 community areas with highest% of households below poverty line.

Problem 8: Which community area(number) is most crime prone?

Problem 9: Use a sub-query to find the name of the community area with highest hardship index.

Problem 10: Use a sub-query to determine the Community Area Name with most number of crimes?