

Homework Assignment 11

Due Date: 12/13/2021 6:00 PM

Please do the following:

1. Exercise:

Step 1: Download the Bus Breakdown and Delays NYC database files here. The link is: [<https://www.kaggle.com/anthobau/busbreakdownanddelays>]

Step 2: Create a database called BBDN in your Postgre instance. Using the CREATE DATABASE command to do this.

Step 3: Create a table called bus_nyc, and then use the COPY command to import the data.

2. Exercise:

Question 1: Count how many bus breakdowns occurred from 2015 to 2016, 2016 to 2017, 2017 to 2018, 2018 to 2019, and 2019 to 2020.

Question 2: In the Busbreakdown_ID column, Using COUNT() command to calculate the how many BusBreakdown_ID.

Using DISTINCT COUNT() to return a row for each unique count.

Find out which Busbreakdown_ID has the most occurrences.

Question 3: In the Run_Type column, find out what kind of Run_Types has and what are they? What is the proportion of each Run_type of total Run_type?

Question 4: In the Route_Number column, what kind of route numbers has and what are they? What is the proportion of each route number of total route number?

Question 5: In the Reason column, what kind of reason has and what are they. What is the proportion of each reason of the total Reason column?

Question 6: In the Schools_Serviced, what kind of schools serviced has and what are they? What is the proportion of each school serviced of total Schools Serviced?

Question 7: In the Occurred_On column, how many times happened in the morning in each year? How many times happened in the afternoon each year (2015-2016, 2016-2017,) .

Question 8: In the Boro column, what kind of Boro has and what are they? What is the proportion of each Boro of total Boro?

Exercise 3: In 2016-2017, how many times did Pre-K/EI bus breakdowns occur?

Exercise 4: In 2016-2017, how many times did Pre-K/EI bus breakdowns in Brox?

In 2016-2017, how many times did Pre-K/EI bus breakdowns in Manhattan?

Exercise 5: In 2016-2017, how many times did the Pre-K/EI bus break down in the morning? In 2016-2017, how many times did the Pre-K/EI bus break down in the afternoon?

Exercise 6: In 2016-2017, what proportion of each Pr-K/EI bus in Manhattan breakdown reason corresponds to the total breakdown reason?

Exercise 7: In 2016-2017, in Bronx, which line of Pre-K/EI bus the most?