ITIS-6120 Applied Databases

Project 3

Voter Data Visualization

Team Members

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Introduction:

This project is targeted towards developing a convenient and better way of visualizing the statistics of election taking place.

Type of Application:

This application is an analytical processing application and it is developed to implement the following use cases:

- The city that has contributed the maximum number of votes, the age group that has contributed for the maximum number of votes and the number of un-casted votes.
- The voting method that is used the most in the election process
- Finding the winning number of votes in a particular city for a particular year and comparing it with the other parties in order to increase the number of votes in the future.
- Finding the mean of the number of votes for the different parties over the years and finding the progress of the party in the election based on the mean.
- Predicting the winner of the election

Description:

Data used for the project:

Mecklenburg Country Election Data

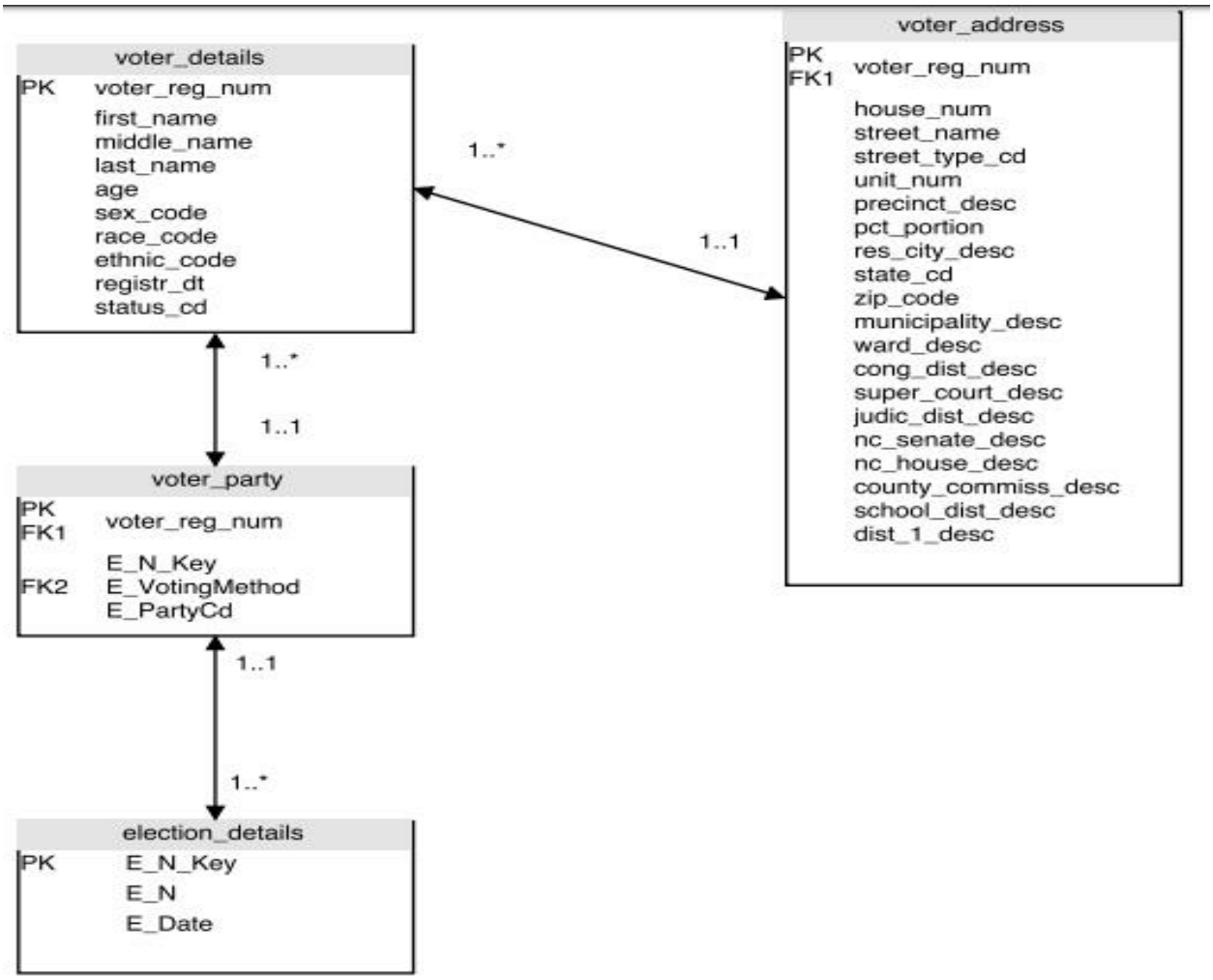
6.5 lakhs of records (substantial data set was used

The data was loaded to the normalized table and then used for querying through the tableau.

Platform Environment Used:

- MySQL 5.7
- Tableau 9.3
- Mecklenburg county Voter dataset

Database Design:



Tables and Views Used:

<u>Tables:</u>

voter_details
voter_party
election_details
voter_address

<u>Views:</u>

Votes_Per_Party
Votes_Per_City
Votes_Per_Age

Votes_Per_VotingMethod

Database Oriented Techniques Applied

Stored Procedures

For Insertion and Update Anomalies.

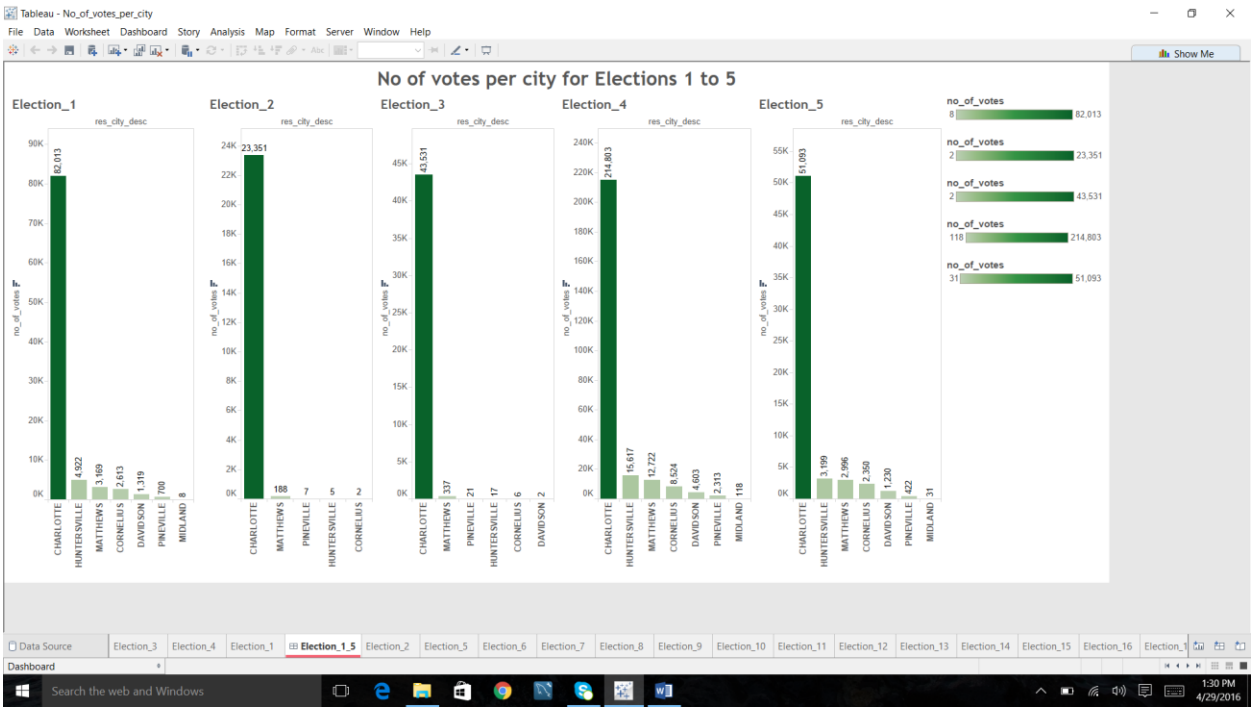
Views

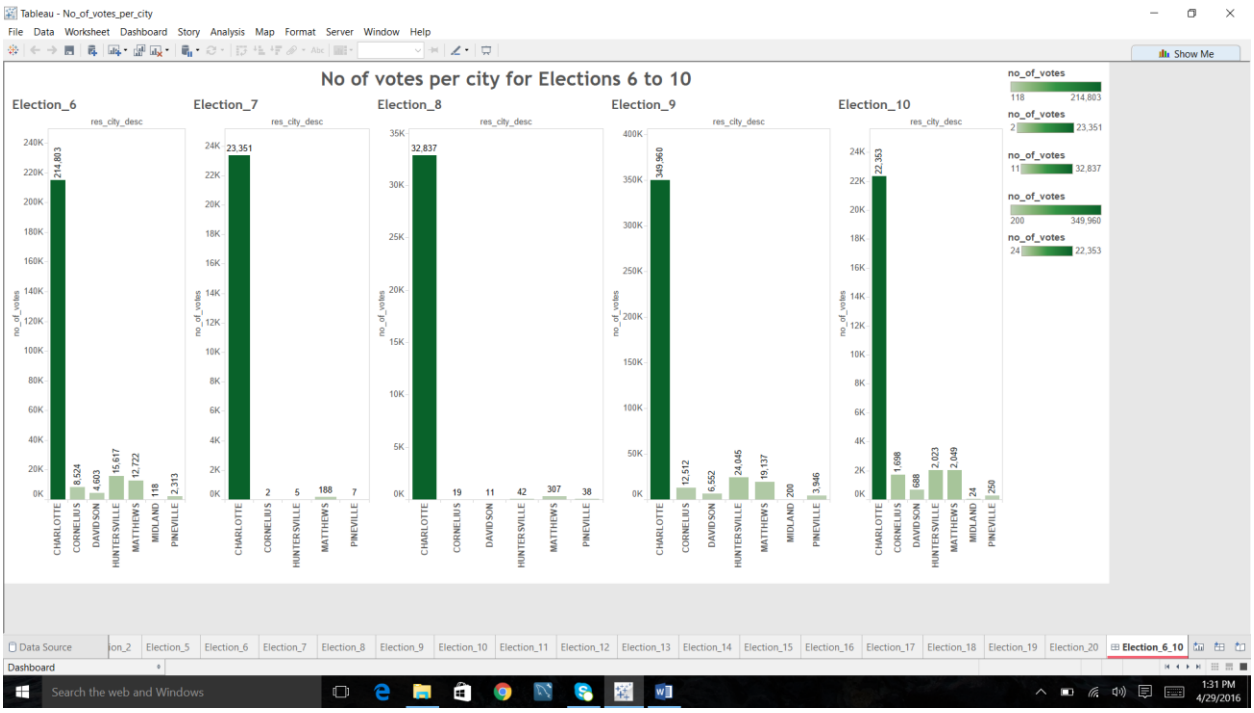
For vote count, prediction and Survey results.

Administrative Commands

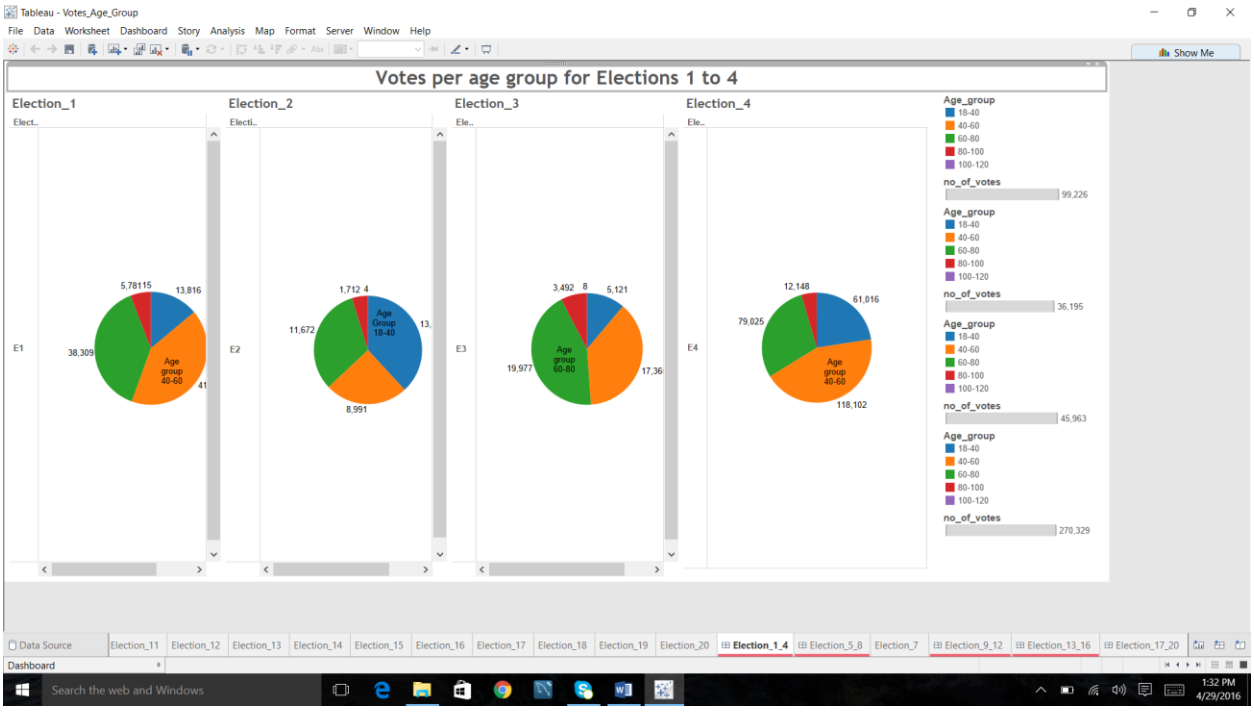
For administrative functionalities.

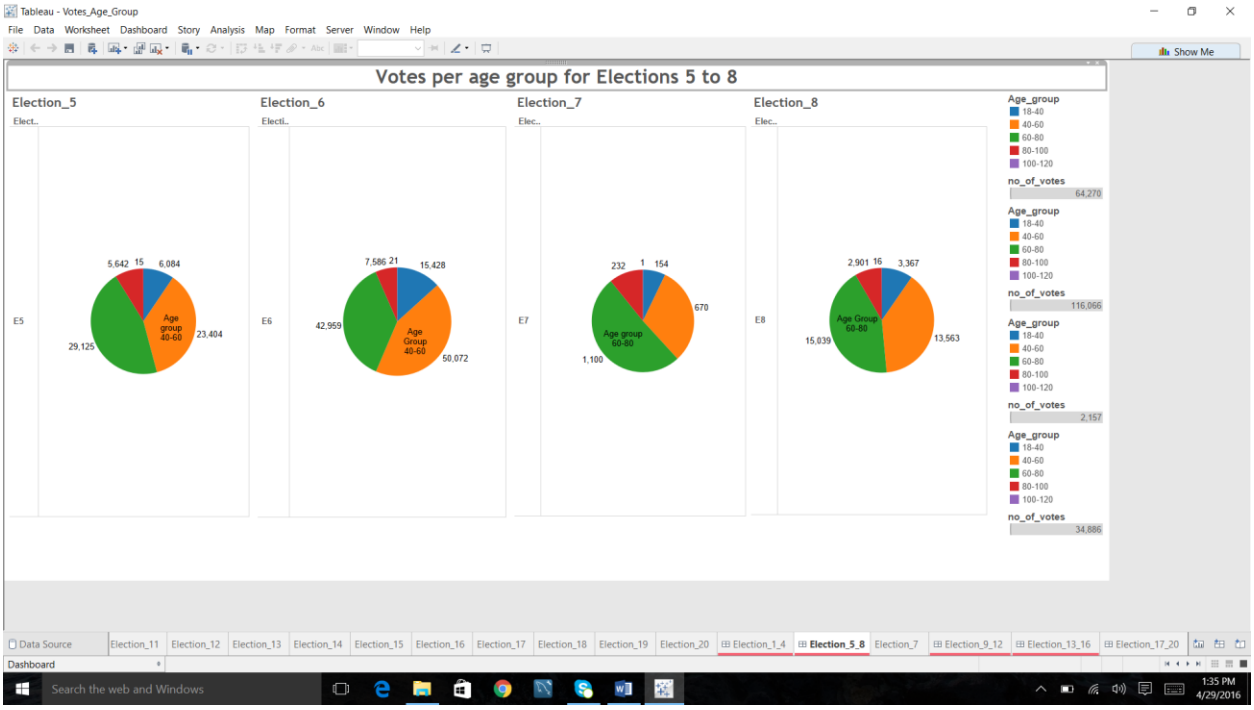
No of Votes per City :



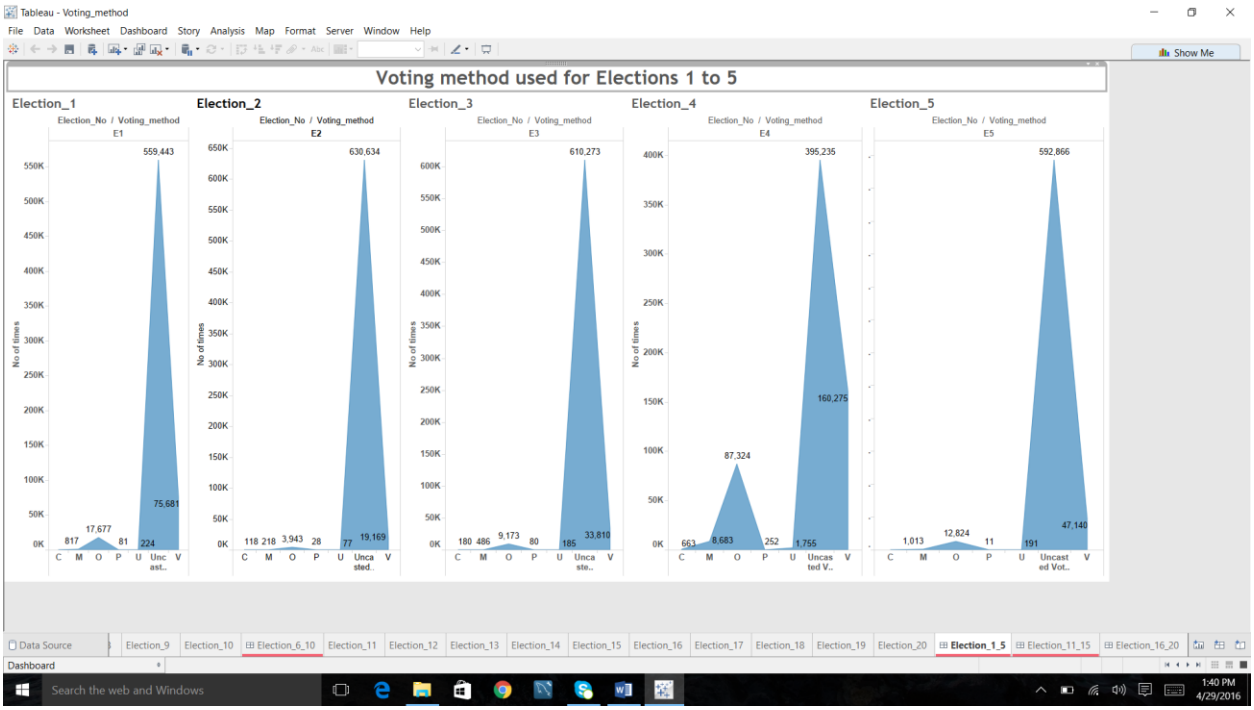


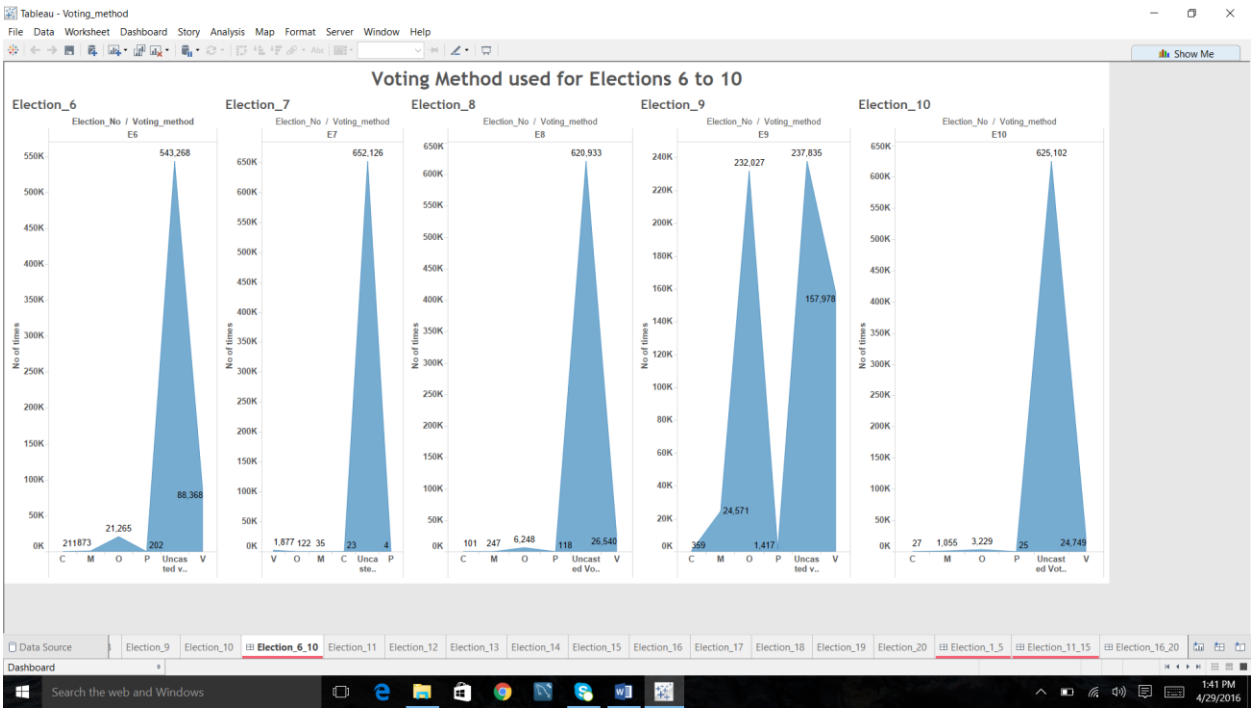
Votes per Age group:





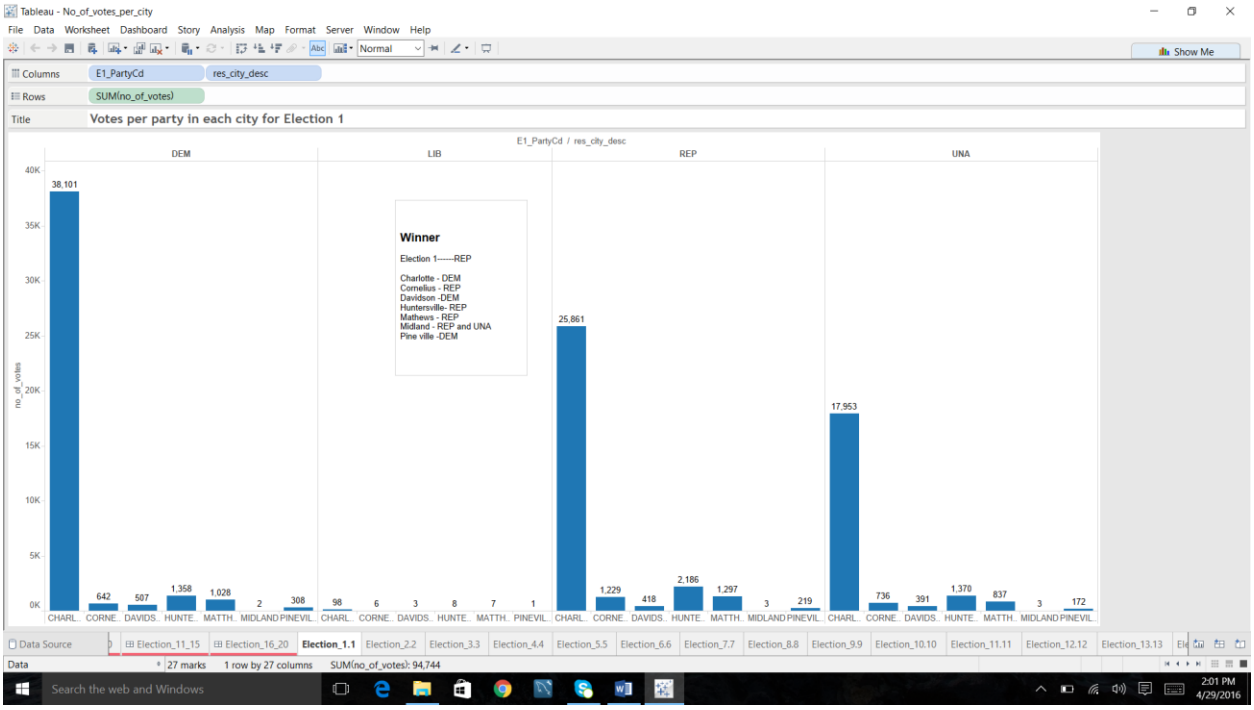
Voting Method used:





No of votes for each party:

Votes per party in each city:



Team Members Contribution:

Tamil Selvan Valathy Shanmugam:

Requirements Analysis, Database Management, documenting and in completion of few use cases using Tableau.

Divya Lakshmi Rani Kuppusamy:

Played a vital role in studying the requirements and in establishing trends, verifying outcomes, and drawing conclusions around the content using tableau.

Ramesh Chelliah:

Ramesh has been a part in collaborating, normalization and Backend Scripting, Tableau. He's also quite possibly the best in conferring with the team members and completing the project.

Challenges Faced:

- Query Execution Delay while running through tableau for custom query.
- Loading the substantial data set into normalized tables.