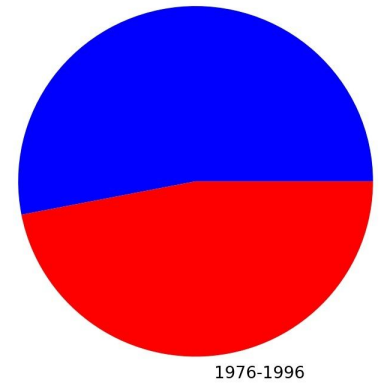Mehdi Daoudi and Supraja Sowmiyanarayanan

Election Analysis Report

In this project, we were asked to process the U.S. President 1976-2016 dataset provided by MIT Election Data and Science Lab in 2017. We used the skills we have learned in this class to produce some meaningful insights regarding the past eleven elections. This project gave us experience processing and analyzing real-world data using Python and its useful packages. Some of the packages we explored in our project were Pandas, Matplotlib, Numpy and Plotly. This report contains visualizations for each of the given tasks. The visualizations accompany our code to show our understanding of the data set and our ability to translate the data and be analytical with our insights.

The first task assigned to us was to find the total number of votes of the country for elections from 2000 to 2016. To visualize this task, we chose to use a pie chart to compare the number of votes from 1976-1996 with the number of votes from 2000-2016. Our visual clearly shows that the more recent elections have had a better voter turnout. More people have voted in elections that occurred between 2000-2016 than in the elections that occured in 1976-1996. This statistic could be attributed to many different reasons such as a larger population, more voter registr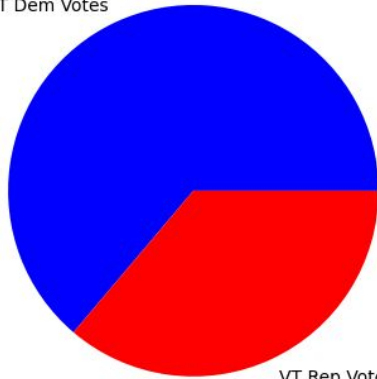ation and decreased voter suppression (although it is still rampant today). In recent years, American voters have realized how important their vote is to protect democracy and prevent candidates who don't act in the best interest of the country from serving terms.
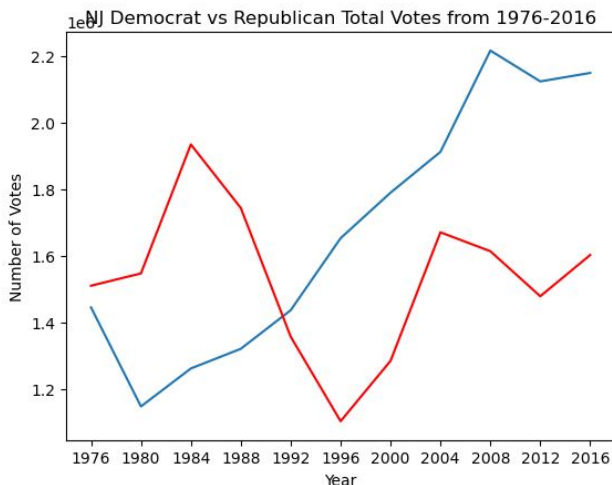

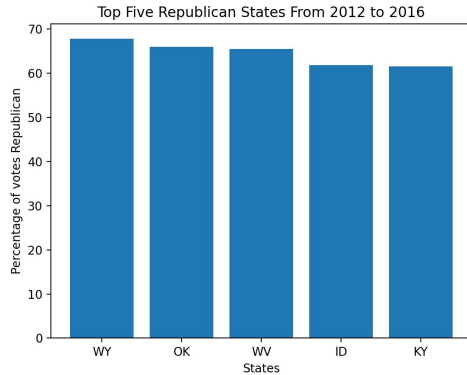Total Votes Comparison
2000-2016
1976-1996

The second task asked us to compare the number of votes and percentages for Republican and Democrat across a state of interest between the 2000 to 2016 elections. We chose to look at Vermont. The visual that we created is a pie chart that has two values. With the labels, it is easy to see that Vermont has had more democratic votes than republican votes in the five elections between 2000-2016. In the current day, Vermont is a reliable Democractic state so the insights we extracted from our data set does not come as a surprise. However, it is interesting to note that historically, until 1988, Vermont was predominantly a Republican state. Research shows that this is due to disorganization of the Republican party in the later part of the 1900s.

VT Votes from 2000-2016 Total
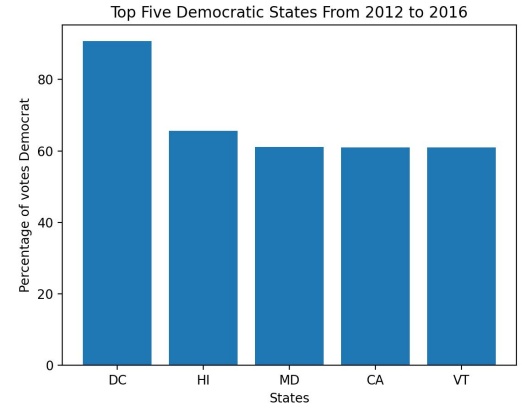VT Dem Votes
VT Rep Votes

This line graph depicts the voting trends of Republicans and Democrats in New Jersey from 1976 to 2016 as asked in task 4. The red line represents Republican votes and the blue represents Democratic votes. It is evident Democratic votes have increased steadily since 1980. Republican votes on the other hand had a steady decline from 1984 to about 1996 but have since been rising up. Like the data insights we gathered from our graphs, voter turnout has been higher in recent years due to more initiatives to get citizens to vote.

NJ Democrat vs Republican Total Votes from 1976-2016

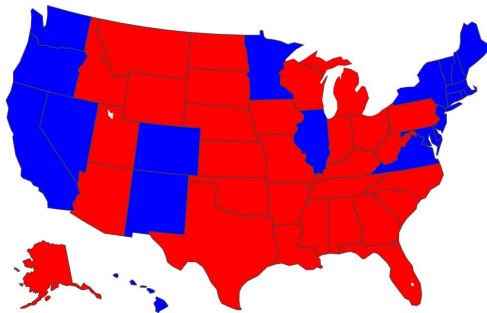The third task illustrates the top five states that have the highest democratic and republican support in the 2012 and 2016 elections. For this task, a bar graph is the best way to show our findings because we are able to visually compare the percentages of support between the top five states for each party. An interesting geographical pattern is t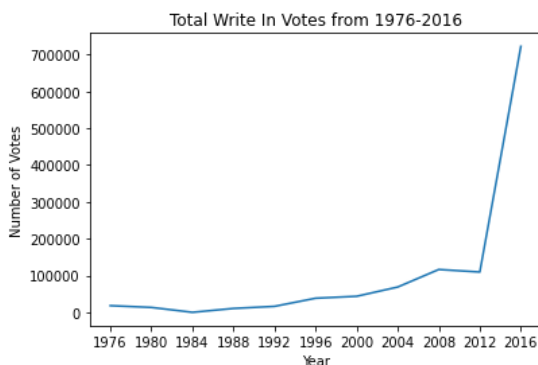hat Demographic states are heavily concentrated in the East Coast. This geographical pattern can be seen better by looking at more than the top five states because there is a larger sample size to compare. In both instances of top five or top ten, California and Hawaii the only two states out of the region. By contrast, top Republican states share a geographic distribution with concentration in the west, midwest and south.

Top Five Republican States From 2012 to 2016

Top Five Democratic States From 2012 to 2016

USA Election Winners 2016

This map represents the electoral vote winners of each state for the 2016 election, which was a highly contested election with a surprising outcome. As you can see by the distribution of reds and blues, the majority of the states gave their electoral votes to the Republican candidate, Donald Trump. This visual along with the top 5 Republican states and top five Democratic states offer the same insight regarding geographical trends. The east coast states and the west coast states tend to vote more democratically than the midwest and southern states. This is largely due to differences in culture and ideology.

For our two extra insights, we focused on the write in votes and the trends that accompany it. Our first insight looks at the top five states with the most write in votes from 2012 to 2016. Vermont produced the most write in votes in that time period. However, the numbers show that there was a very small percentage of write in votes which indicates that this is not the primary method of voting.

Top Five Write In States From 2012 to 2016

Total Write In Votes from 1976-2016

Our second insight, looks at the total write in votes from 1976 to 2016. We noticed a very large jump in total write in votes in 2016 which does not follow the normal trends. In 2016 there was a drastic increase in write in votes for Haramabe, a gorilla that was shot and killed by a zoo keeper when a child climbed to the enclosure. Overall, the trends of write-ins still remain low.