Analysis

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This markdown is just an overview of the process that I used to get my information.

Data

I'm going to be pulling the covid numbers from the New York Times Github. They have total numbers of cases and deaths per county and per state.

```
#https://github.com/nytimes/covid-19-data
setwd("C:/Users/Prashan.Welipitiya/Desktop/covid-19-data")
covid_states = read.csv("us-states.csv")
covid_states$date <- ymd(covid_states$date)
covid_counties = read.csv("us-counties.csv")
covid_counties$date <- ymd(covid_counties$date)
head(covid_counties)</pre>
```

```
date
                   county
                                state fips cases deaths
## 1 2020-01-21 Snohomish Washington 53061
                                                       0
## 2 2020-01-22 Snohomish Washington 53061
                                                       0
## 3 2020-01-23 Snohomish Washington 53061
                                                       0
                                                1
                            Illinois 17031
                                                       0
## 4 2020-01-24
                     Cook
## 5 2020-01-24 Snohomish Washington 53061
                                                1
                                                       0
## 6 2020-01-25
                   Orange California 6059
                                                       0
```

I'm going to be using a dataset that was part of a homework assignments in an old class. This dataset has a lot of important information that I am curious about on counties in the US. It includes percent populations of 2016 voting information, elderly, black, white, hispanic, asian, education and income.

```
county_votes16 <- readRDS(url("https://ericwfox.github.io/data/county_votes16.rds"))
head(county_votes16)</pre>
```

```
##
                    county clinton_pctvotes trump_pctvotes obama_pctvotes pct_pop65
## 1
        AL Autauga County
                                       23.96
                                                       73.44
                                                                       26.58
                                                                                  13.8
## 2
        AL Baldwin County
                                       19.57
                                                       77.35
                                                                       21.57
                                                                                  18.7
## 3
        AL Barbour County
                                       46.66
                                                       52.27
                                                                       51.25
                                                                                  16.5
## 4
        AL
              Bibb County
                                       21.42
                                                       76.97
                                                                       26.22
                                                                                  14.8
        AL Blount County
                                        8.47
                                                                       12.35
                                                                                  17.0
## 5
                                                       89.85
## 6
        AL Bullock County
                                       75.09
                                                       24.23
                                                                       76.31
                                                                                  14.9
##
     pct_black pct_white pct_hispanic pct_asian highschool bachelors income
          18.7
                     77.9
                                    2.7
                                              1.1
                                                         85.6
                                                                   20.9 53.682
## 1
                                              0.9
                                                                   27.7 50.221
           9.6
                     87.1
                                    4.6
                                                         89.1
## 2
```

```
## 3
          47.6
                    50.2
                                                        73.7
                                   4.5
                                             0.5
                                                                  13.4 32.911
## 4
          22.1
                    76.3
                                   2.1
                                             0.2
                                                        77.5
                                                                  12.1 36.447
## 5
                    96.0
                                                        77.0
                                                                  12.1 44.145
           1.8
                                   8.7
                                             0.3
## 6
          70.1
                    26.9
                                   7.5
                                             0.3
                                                        67.8
                                                                  12.5 32.033
##
    trump_win
## 1
## 2
             1
## 3
             1
## 4
             1
## 5
             1
## 6
             0
```

#summary(county_votes16)

```
# To match the New York Times data, I'm going to add a collumn that changes the state abbreviation to t
county_votes16$state_Name <- state.name[match(county_votes16$state,state.abb)]

# And take the word county out of the county names.
county_votes16$county_Name <- as.character(county_votes16$county)
county_votes16$county_Name <- substr(county_votes16$county_Name,1,nchar(county_votes16$county_Name) - 7
head(county_votes16)</pre>
```

```
##
                   county clinton_pctvotes trump_pctvotes obama_pctvotes pct_pop65
## 1
                                                     73.44
                                                                                13.8
        AL Autauga County
                                     23.96
                                                                    26.58
## 2
        AL Baldwin County
                                     19.57
                                                     77.35
                                                                     21.57
                                                                                18.7
                                                                                16.5
## 3
        AL Barbour County
                                      46.66
                                                     52.27
                                                                    51.25
## 4
              Bibb County
                                      21.42
                                                     76.97
                                                                    26.22
                                                                                14.8
        AL
## 5
        AL Blount County
                                      8.47
                                                                                17.0
                                                     89.85
                                                                    12.35
        AL Bullock County
                                     75.09
                                                     24.23
                                                                    76.31
                                                                                14.9
##
    pct_black pct_white pct_hispanic pct_asian highschool bachelors income
## 1
          18.7
                    77.9
                                  2.7
                                             1.1
                                                       85.6
                                                                 20.9 53.682
## 2
           9.6
                    87.1
                                  4.6
                                             0.9
                                                       89.1
                                                                 27.7 50.221
## 3
          47.6
                                                                 13.4 32.911
                    50.2
                                  4.5
                                             0.5
                                                       73.7
## 4
          22.1
                    76.3
                                  2.1
                                             0.2
                                                       77.5
                                                                 12.1 36.447
## 5
           1.8
                    96.0
                                  8.7
                                            0.3
                                                       77.0
                                                                 12.1 44.145
## 6
                    26.9
                                  7.5
                                            0.3
                                                       67.8
                                                                 12.5 32.033
          70.1
##
     trump_win state_Name county_Name
## 1
             1
                  Alabama
                              Autauga
## 2
             1
                              Baldwin
                  Alabama
## 3
                              Barbour
             1
                  Alabama
## 4
             1
                 Alabama
                                 Bibb
## 5
             1
                  Alabama
                               Blount
## 6
                  Alabama
                              Bullock
```