

# Assignment 3 - Section 1 project

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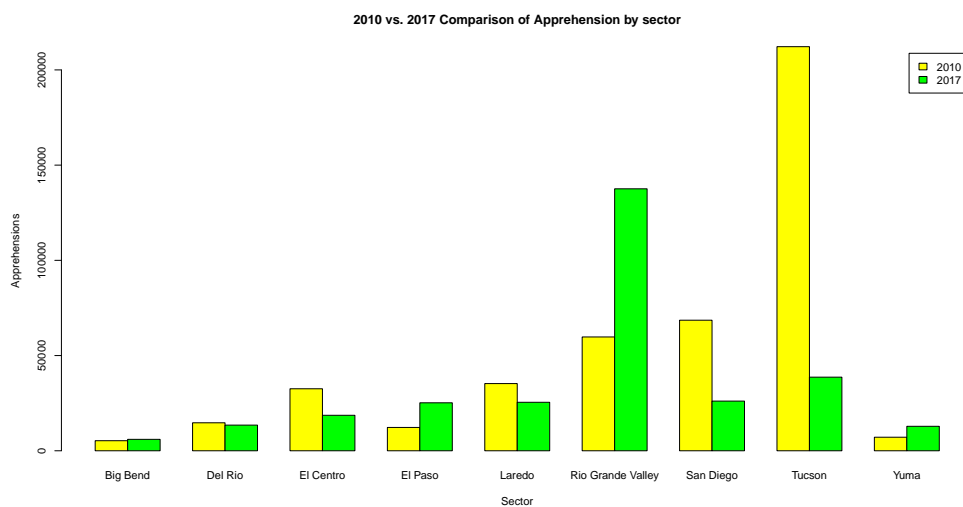
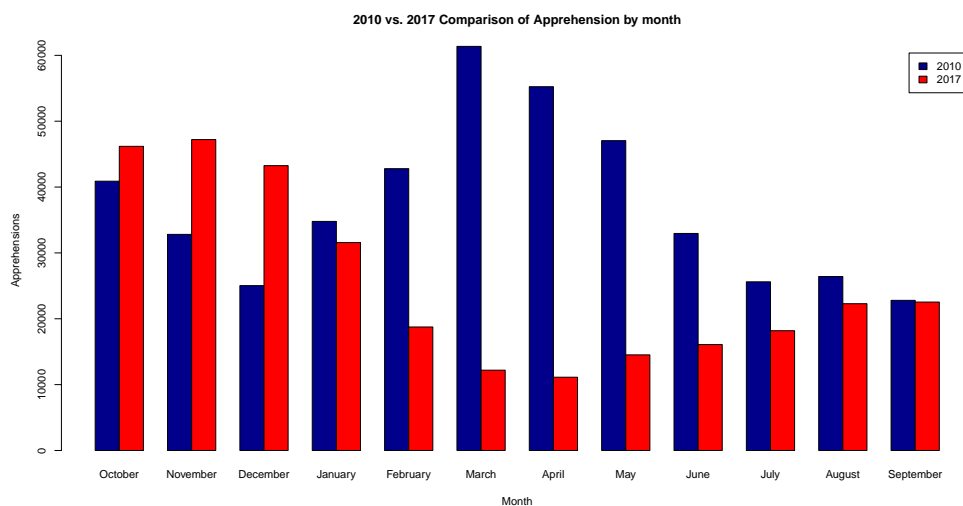
## News Background

### US-Mexico border apprehensions hit 17-year lows

(Washington, CNN) Apprehensions at the US-Mexico border reached historic lows in April, continuing a downward slide in the first few months of the Trump administration.

## Statistics Analysis

Comparing the 2010 and 2017 statistics by month and sector:



The sector with the most apprehensions for 2010 is Tucson. The sector with the most apprehensions for 2017 is Rio Grande Valley. Then we do a two-sample Welch t-test. As a result, the p-value is 0.06346. Fail to reject the null hypothesis of no change, showing no significant change in the maximum.

Then we do a two-sample Welch t-test again on 3 month periods with the most apprehensions in 2010 and 2017. As a result, the p-value is 0.4042. Fail to reject the null hypothesis of no change, showing no significant change in the maximum 3 consecutive monthly apprehensions.

#### Time Series Chart

### Historical Apprehension data from 2000 to 2017

