Statistical Methods for Data Science
Mini Project 2

Exercise 1 (10 points):

(a) Use R to make a map of state-by-state forecast of Hillary Clinton's chance of winning in 2016 presidential election as predicted by FiveThirtyEight.com on Sep 19, 2016. The data are stored in a file (clinton_chance_sep9_2016.csv) on eLearning. It presents chances as percentages. Be sure to include Alaska and Hawaii in your map.

Read the handout about map making in R for a prototype example. Note that Alaska and Hawaii are not included in this example.

2 Bonus points: Get the map exactly as on the website

http://projects.fivethirtyeight.com/2016-election-forecast/?ex_cid=rrpromo

on Sep 19, 2006. This map changes daily. So you may not have the version that corresponds to the data being provided. However, a screen shot of the map is posted on eLearning. Ignore the mention of 'tipping points.' Note that this map uses shades of red for Donald Trump and shades of blue for Hillary Clinton. Trump's chances can be computed by subtracting Clinton's chances from 100.

(b) What does the map show? Justify your conclusions.

Instructions:

- Due date: Thursday, September 29.
- Total points = 10
- Submit a typed report and include all relevant plots.
- You can work on the project either individually or in a group of no more than two students. In case of the latter, submit only one report for the group, and include a description of the contribution of each member.
- Do a good job.
- You must use the following template for your report:

  Mini Project #
  Name
  Names of group members (if applicable)
  Contributions of group members
  Answers and justifications for each exercise

  Provide the R codes in an appendix. Your code must be annotated. No points may be given if a brief look at the code does not tell us what it is doing.