**Written Questions to Problem Set #4**

**1. Who do you think will win the nomination? Why do you think they will win?**

I think that Bernie will win the democratic party and will go against Trump. As far as presidential it could honestly go either way. I say this because, the country is at a pretty even split right now.

**3. Three observations about the data**

1. At the beginning you notice that Biden is doing really well across a series of platforms, but then as you scroll down you notice that Sanders is killing it.
2. I noticed that across the board the spread of these candidates is pretty large considering the data.
3. Another thing that I noticed is that some of the rows are repeated.

**14. Who would win and why?**

Based off the data that printed, these candidates are still very close, but due to the weighted sums, I would say Biden as winning the race.

**16. Which candidates are most correlated? Which are least correlated?**

Based off of the data printed, Biden and Klobuchat are the most correlated, while Sanders and Steyer are the least correlated.

**18. Who do you think will win based on this data?**

After computing the mean and weighted mean, based on the data that printed, I think that Biden will win regardless of it being the mean or the weighted mean, he leads in both.

**19. Difference between Biden and Sanders.**

The difference is very small, at a 0.109 difference. Biden is at 1.139 and Sanders is at 1.248.

**20. Do your conclusions stay the same as they did with the confidence intervals?**

These conclusions are smaller but lead to the same inference in the end that Biden is in fact leading.

**22. Do you notice any major differences in the predictions made by the data? Specifically, compare the aggregated predictions (mean, weighted mean, and confidence intervals) from your old data with the raw means, weighted means, and confidence intervals on your new data. Was your Super Tuesday aggregation a good predictor of the real polls? What about the data leads you to this conclusion? What does this say about the correlation theory from Problem 17?**

Based off of everything we did prior to this datafile, in the new atafile, we have seen a lot of the numbers have in fact decrease, yet Biden still leads Sanders in all these aspects to our polling data.