

# Kevin Ducat DS710 Final Project

---

## *Analysis of Tweets for “The Prom” the musical during the #MacysParade*

### Introduction

During the Macy's Thanksgiving Day Parade parade that was held on November, 22, 2018, one of the performances that was aired on The NBC Television Network was a production performed by the cast of the Broadway musical “The Prom”. At the end of the production, the two lead actresses kissed. The kiss brought up quite a large debate on Twitter.

A recent Gallop poll that was conducted in May of 2018 found that 67% of people are in favor of same sex marriages. With these results, I would like to study the sentiment of the Tweets gathered during the parade, and determine if people reacted positively or negatively towards the performance. Once I have gathered the data, I will then compare the sentiment results found on Twitter to the results from the [Gallop Poll](#).

### Data Collection and Analysis

Twitter data was collected with Python using the the tweepy library and the Rest API. I gathered information from 101,737 tweets that included the hastag #MacysParade on the day of the Macy's Thanksgiving Day Parade.

After this data was gathered, I turned my analysis to R where I did further analysis of the data. In R, I focused my attention on the 3,991 tweets that contained the words “Prom” or “Kiss”. For the remaining 3,991 tweets I used the syuzhet library to calculate Positive and Negative sentiment analysis on the description of the twitter feed.

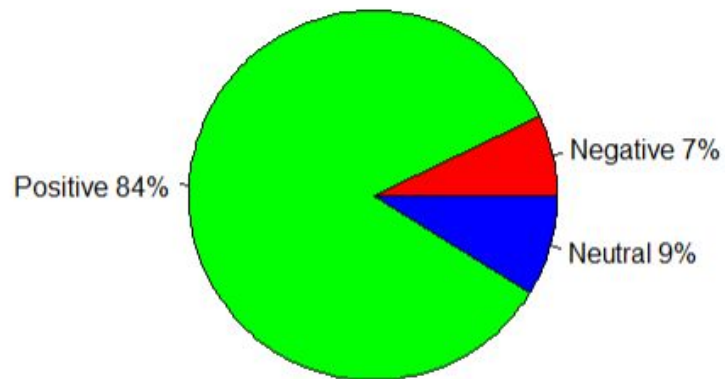
### Results / Conclusion

I was interested in comparing the positive negative sentiment and see if that would go along with a recent Gallop poll where the poll found that 67% of people are in favor of same sex marriages. From these results, I was able to analyze:

- Null Hypothesis ( $H_0$ ) ( $P = 0.67$ )
- Alternative Hypothesis ( $H_a$ ) ( $P < 0.67$ )
- P: The proportion of Twitter users sentiment who approve of the kiss between the two actresses.

After I was complete, I used the results from a 2-sided alternative hypothesis to find a strong evidence that the people on twitter are in favor of the kiss that happened between the two female cast members of “The Prom”.

## Sentiment of Tweets about The Musical Prom during the Macys Parade



Gallop Poll -

<https://news.gallup.com/poll/234866/two-three-americans-support-sex-marriage.aspx>