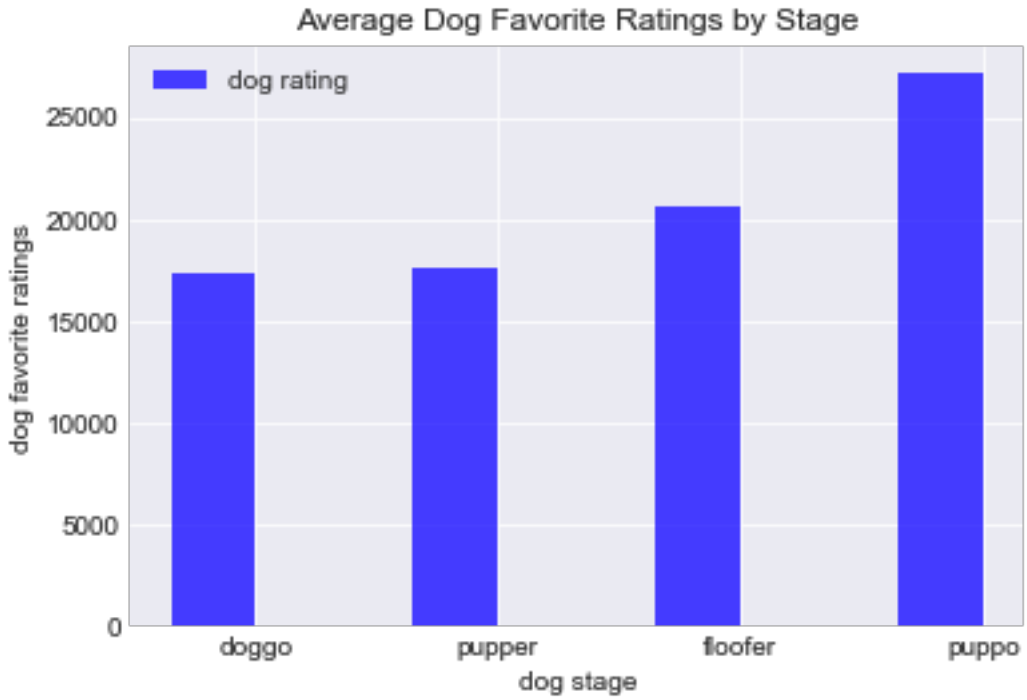
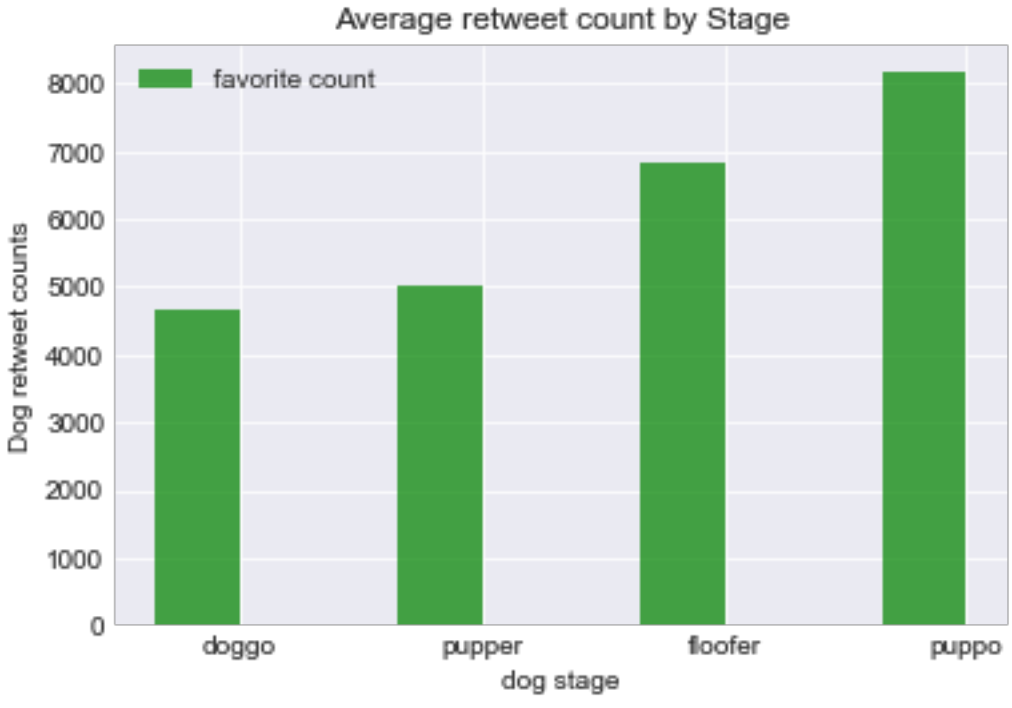
1. My first visualization is a bar chart for the mean of of favorite_count for each dog stage.
I consider the more of favorite number you get , the more popular the dog is. And the result is the dogs in the stage puppo got the most retweet, floofer got the second most, pupper got third, and doggo got the least amount of favorite_count in average.




2. My second visualization is a bar chart for the mean of retweet_count for each dog stage. I consider the more retweet_count the more popular the dog is. And the result is the dogs in the stage puppo got the most retweet, floofer get the second most, pupper got the third , and the doggo got the least amount of retweet in average. Which matches the last insight.



3. Third visualization. I did a hypothesis test on the prediction rate on prediction 1 base on the search_info.csv file.  The null is the whole sample mean is the same as the 20 sample mean. It is a 20 sample data set. I used bootstrapping method, random select 10 samples each time from the sample and simulate 10000 for this process to get the mean of prediction 1 rate. I plot the histogram of the null distribution. And also calculate the p value, and conclude that the mean of the whole sample is the mean of the sample set.