act_report

March 31, 2018

```
In [1]: # import needed libraries
        import pandas as pd
        import numpy as np
        import requests
        import os
        import json
        import time
        from matplotlib import pyplot as plt
        %matplotlib inline
```
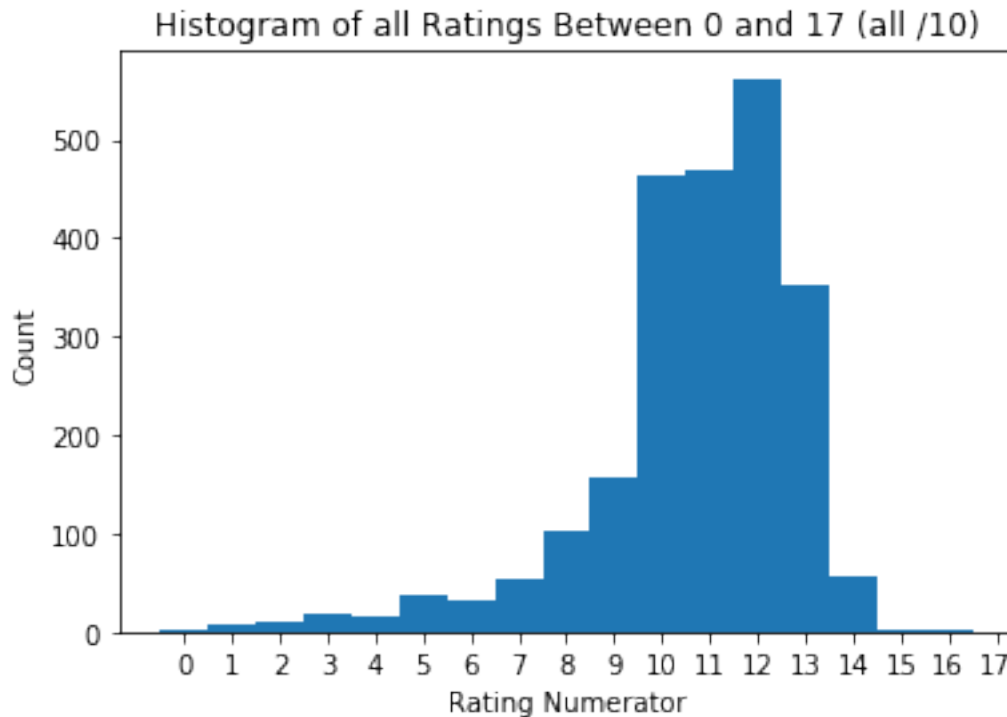
```
In [2]: # get the data
        twitter_archive_master = pd.read_csv('twitter_archive_master.csv')
```

0.0.1 All About WeRateDogs

The Rating System

WeRateDogs has quite a unique ratings system, and though it isn't spelled out, patterns are readily apparent. Since, as Brent now knows, these are "good dogs", the most common ratings for dogs are 10/10, 11/10, 12/10, and 13/10 (as seen in the plot, "Histogram of all Ratings Between 0 and 17 (all /10)". However, in the data we looked at, there were ratings all the way from 0/10 to 1776/10. Some of the more unusual ratings come from a desire to maintain a theme from the tweet's text. For instance, a picture of a patriotic pup celebrating Independence Day is linked to the numerator of 1776, giving a nod to the year the USA was founded. Another attribute of the rating system is the ability to rate multiple dogs at once (as long as they have the same rating). Let's say that you have a picture of two dogs, and you want to rate them as 12/10. Since there are two of them, the rating would actually be 24/20! Now, with respect to the histogram of ratings, multi-dog ratings have already been normalized to be single-dog ratings. And, the vast majority of tweets were for a single dog.

```
In [3]: # let's plot the ratings that are less than 20
        plt.hist(twitter_archive_master.rating_numerator[twitter_archive_master.rating_numerator
                 bins=np.arange(0,18,step=1), align='left');
        plt.xticks(np.arange(0,18,step=1));
        plt.title('Histogram of all Ratings Between 0 and 17 (all /10)');
        plt.xlabel('Rating Numerator');
        plt.ylabel('Count');
```
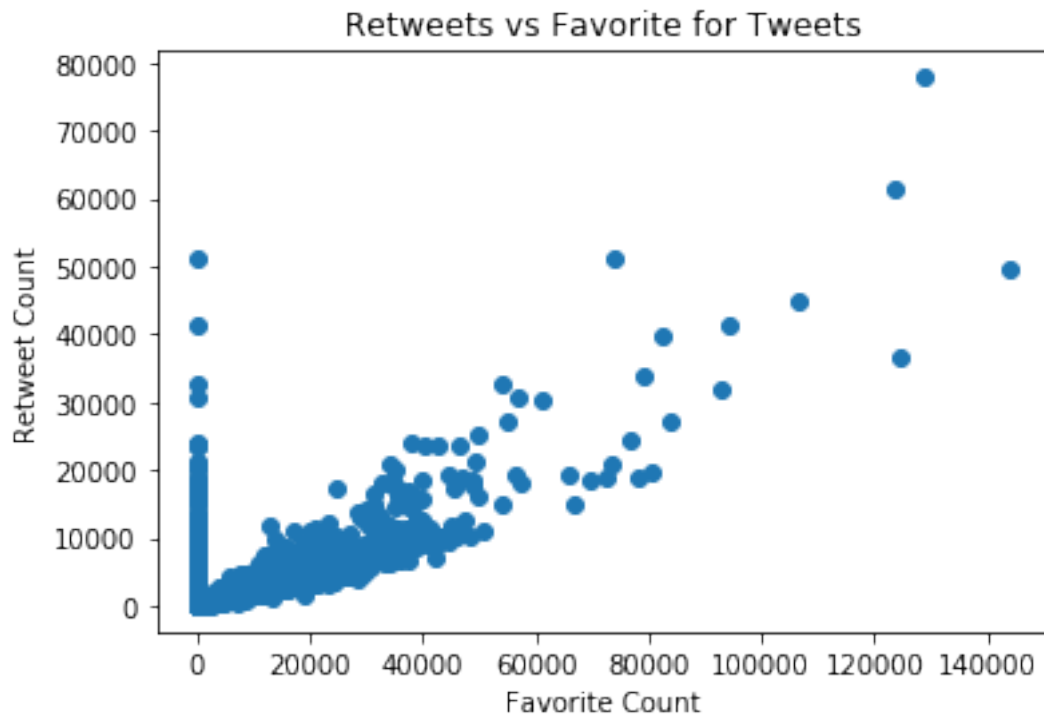
1

Histogram of all Ratings Between 0 and 17 (all /10)

Most Popular Pups

You may ask, "What kind of dogs are most commonly rated?" Well, you should know that in the data we looked at, there were hundreds of kinds of dogs, and the most common type of dog only accounted for 7.18% of tweets. But, four breeds were significantly more commonly found than the others. They were the Golden Retriever (with 7.18% of tweets), the Labrador Retriever (with 4.82% of tweets), the Pembroke Welsh Corgi (with 4.29% of tweets), and the Chihuahua (with 4.00% of tweets). People do love their retrievers.

Favorites and Retweets

Finally, on the subject of 'favorites' and 'retweets'. As you might expect, there was quite a range in number. Some tweets didn't have any 'favorites' or 'retweets', and one had a favorite count over 140,000, and another had a retweet count of close to 80,000! However, there tended to be a fairly linear relationship between the number of 'favorites' and the number of 'retweets' for a particular tweet. As one went up, the other tended to go up, as well, which you can see in the plot titled "Retweets vs Favorites for Tweets".

```
In [4]: # plot retweet_count vs favorite_count
        plt.scatter(twitter_archive_master.favorite_count, twitter_archive_master.retweet_count)
        plt.xlabel('Favorite Count')
        plt.ylabel('Retweet Count')
        plt.title('Retweets vs Favorite for Tweets');
```

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Retweets vs Favorite for Tweets

Conclusion

WeRateDogs is an entertaining Twitter account, and if you're in the mood for some levity, and enjoy pictures of canine companions, you should definitely check it out!