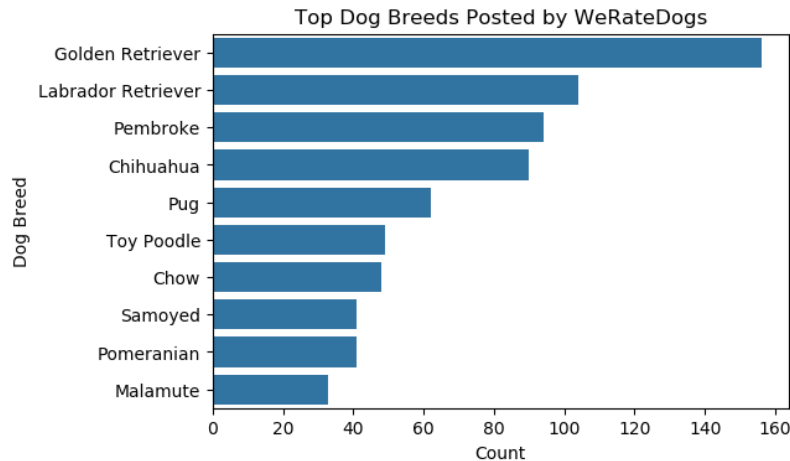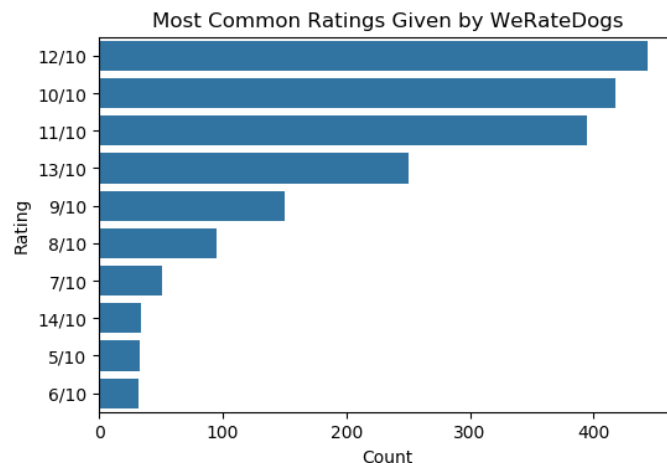# Act Report

After the wrangling process, the data is ready to be analyzed. I proposed these five research questions that was most informative and interesting based on the collected data. I provided some visualizations for each research question to further elaborate the results.

Research Question #1: *What are the top dog breeds posted by WeRateDogs?*

Based on the tweets posted by WeRateDogs, the dog breed with the highest count is Golden Retiever with almost 160 tweets within the timeframe analyzed. It has over 50 posts more than the second highest count which is the Labrador Retriever, followed by Pembroke and Chihuahua.

Research Question #2: *What are the most common ratings given by WeRateDogs?*

The ratings given by WeRateDogs are mostly in the range of 5 to 14 out of 10. There is an upward trend from lower to higher ratings, with the most common rating being 12/10. The top three ratings which are 11/10, 10/10, and 12/10 are around 400 counts each out of roughly 2000 counts of the total data.

Research Question #3: *Which dog breeds have the highest average retweet count?*

```
breed
Bedlington Terrier         7086.166667
Afghan Hound               5050.000000
Standard Poodle            4729.363636
French Bulldog             4658.600000
English Springer           4645.500000
Saluki                     4372.000000
Whippet                    4347.000000
Cocker Spaniel             4190.066667
Eskimo Dog                 4104.636364
Samoyed                    4017.365854
Flat-Coated Retriever      3914.750000
Irish Water Spaniel        3826.666667
Great Pyrenees             3816.200000
Bouvier Des Flandres       3795.000000
Lakeland Terrier           3688.176471
Mexican Hairless           3623.428571
Tibetan Mastiff            3545.250000
Black-And-Tan Coonhound    3507.000000
Leonberg                   3269.666667
Golden Retriever           3232.467949
Name: retweet_count, dtype: float64
```
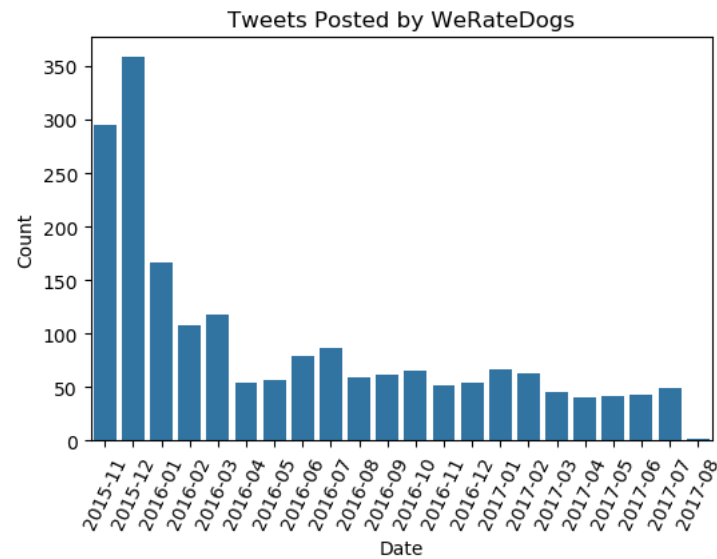
Based on the average retweet counts categorized by each breed, Bedlington Terrier has the highest average with over 7000 retweets, strongly leading above the second and third highest of 5050 and 4729 retweets for Afghan Hound and Standard Poodle. Almost all of the top 20 breeds with the highest average retweet count, however, are not in the top 10 breeds with the highest tweet counts posted by WeRateDogs. This indicates the high average might be due to a few tweets with unusually high number of retweets.

Research Question #4: *Which dog breeds have the highest average favorite count?*

```
breed
Bedlington Terrier         22568.666667
Saluki                     21711.250000
French Bulldog             18318.966667
Bouvier Des Flandres       16078.000000
Afghan Hound               15392.666667
Black-And-Tan Coonhound    15291.500000
Flat-Coated Retriever      15132.750000
Irish Water Spaniel        14614.000000
Leonberg                   13256.000000
Whippet                    13180.181818
English Springer           12684.000000
Standard Poodle            12489.000000
Cocker Spaniel             12310.233333
Samoyed                    12287.658537
Border Terrier             12185.571429
Mexican Hairless           12141.857143
Eskimo Dog                 11583.090909
Cardigan                   11437.380952
Golden Retriever           11303.762821
Lakeland Terrier           11289.764706
Name: favorite_count, dtype: float64
```

The dog breed with the highest average favorite counts is Bedlington Terrier, which also has the highest average retweets. Both Bedlington Terrier and Saluki, the second highest breed, have over 20000 average favorite counts for their respective tweets posted by WeRateDogs. Similar to the previous one, most of the top 20 breeds with the highest average favorite count are not the top 10 breeds with the highest number of tweets posted by WeRateDogs.

Research Question #5: *When was WeRateDogs most active in Twitter?*

Tweets Posted by WeRateDogs

       The chronological analysis of the number of tweets of WeRateDogs from November 2015 to August 2017 shows that the user is more active in the end of 2015 with almost 300 tweets in November and over 350 tweets in December. The numbers drop significantly to around 50 tweets per month for most of period included in the data. Factors contributing to this significant change is not known from our data, however, hence a causal relationship cannot be inferred.