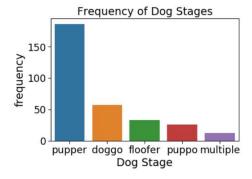
Final Report

@dog_rates [1] is an extremely popular twitter account which posts humorous dog photos and rates the dogs in a comical way. Most of the ratings are between 10/10 to 14/10. In addition, certain dogs are also classified by their dog stage, terms popularized by the same twitter handle and described in their book '#WeRateDogs: The Most Hillarious and Adorable Pups You've Ever Seen'[2].

Throughout this project, I sought to gather some interesting and important information while trying to combine all 3 datasets.

The results of this investigation are detailed below.

Question 1: Which dog stage is the most common?

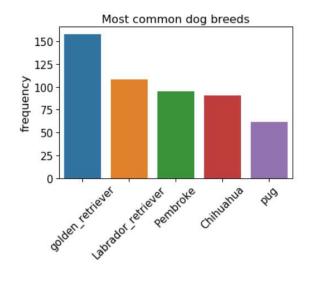


dog_stage	frequency
None	1370
pupper	186
doggo	57
floofer	33
puppo	26
multiple	12

As we can see, the answer to this question is pupper. It appeared 186 times with an image in their timeline from November 15 2015 to August 1st 2017. The dog stage 'None' means there was no dog stage given in the tweet.

Question 2: Which dog breed is the most popular?

I had to rely on the obtained results from the image_prediction algorithm to answer this question. I only considered the cases where the image prediction algorithm correctly guessed a dog breed. In addition, if the first guess was wrong, I considered the second guess and if that was wrong I considered the third guess. At times, the first guess was completely wrong (overshadowed by a large object in the background but the algorithm correctly guessed it on the second or third try.



	frequency
golden_retriever	158.0
Labrador_retriever	108.0
Pembroke	95.0
Chihuahua	91.0
pug	62.0

As we can see, the Golden Retriever was the most common dog breed and it appeared 158 times. In second place we have the Labrador retriever with 108 occurances and in third we have the Pembroke with 95.

Question 3: What is the average rating of all the dogs in the set?

The average rating is 10.73 out of 10

Question 4: What is the average rating for each dog stage and which dog stage received the most favorites, the most retweets?:

	rating_out_of_10	amount_of_favorites	amount_of_retweets	
dog_stage				
None	10.61	8581	2509	
doggo	11.84	19575	6807	
floofer	11.73	8786	2749	
multiple	11.42	15958	5007	
pupper	10.87	7186	2230	
puppo	12.08	21915	6041	

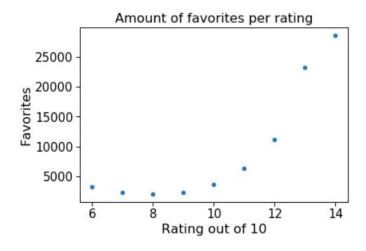
The dog stage 'puppo' had the highest rating with a 12.08/10. 'Puppo' also receives the most favorites/likes per tweet with an average of 21915 while the 'doggo' stage recives an average of 6807 retweets.

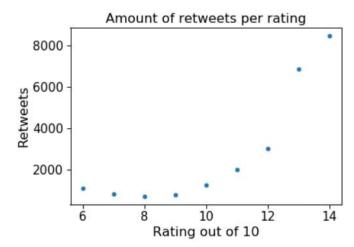
Question 5: Which rating receives the most likes/retweets on average:

	rating_numerator	favorite_count	retweet_count	count
10	6.0	3233	1111	16
12	7.0	2312	826	31
13	8.0	2118	736	67
15	9.0	2373	784	130
17	10.0	3708	1286	352
18	11.0	6358	2018	358
21	12.0	11225	3013	423
22	13.0	23164	6858	229
24	14.0	28586	8454	23

As we can see, the number of favorites/likes increases as the rating increased and the number of retweet as well. There were a few ratings above 14 which I decided to ignore because these were one off occurrences in the data set. The results here make sense because generally, the funnier the caption and the funnier the picture, the higher the rating. Funny tweets generally receive more attention and more 'likes' and 'retweets'. More illustrations are shown in the next page.

When a dog and picture received a rating of 14, it received on average 28586 likes and 8454 retweets.





References:

[1] Online reference: twitter handle for the @dog_rates account is:

https://twitter.com/dog_rates

[2] Online reference: website for the book is

https://www.amazon.com/WeRateDogs-Most-Hilarious-Adorable-Youve/dp/1510717145