

# Udacity Project 3 : Wrangle and Analyze Data

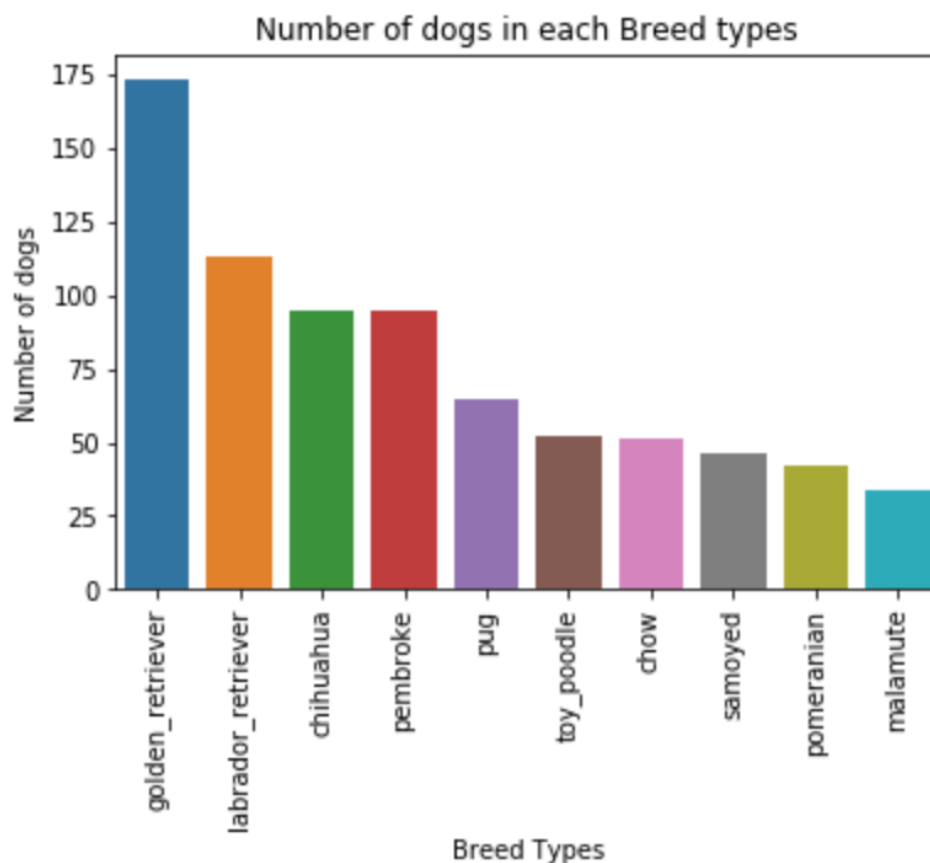
## Act Report

### Question :

- Most popularity breed types and dog stages
- Trends of popularity breed types in each years
- Top and the lowest confident for each breed types

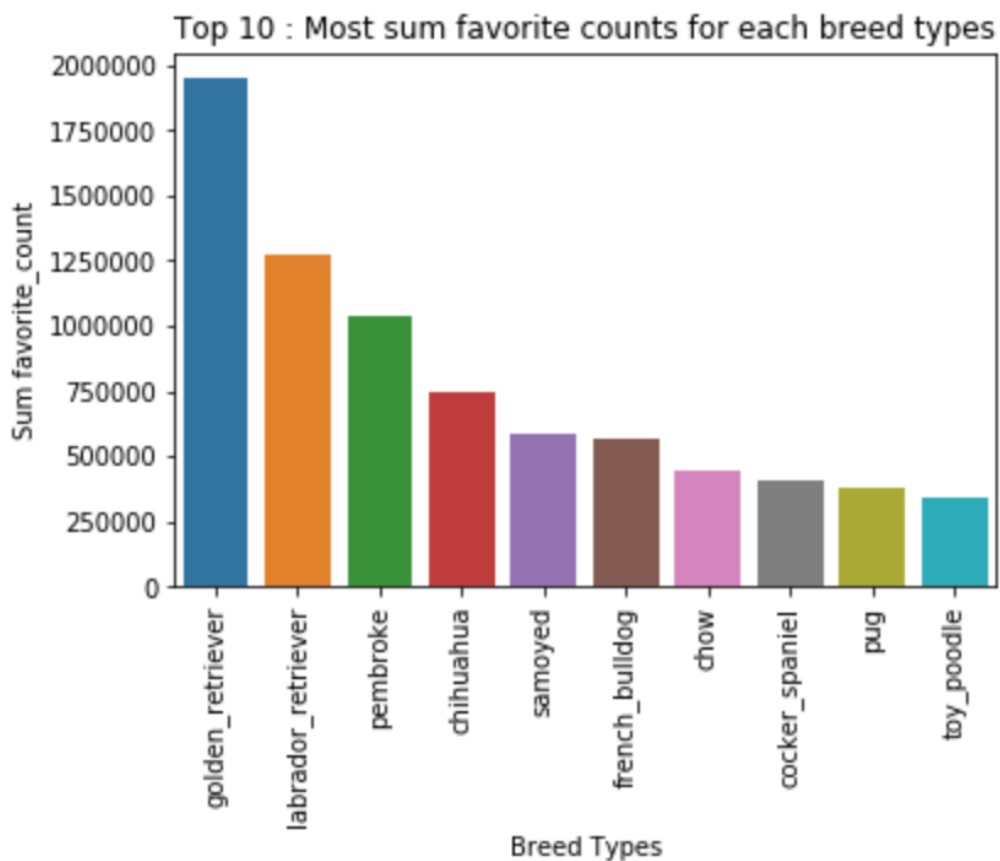
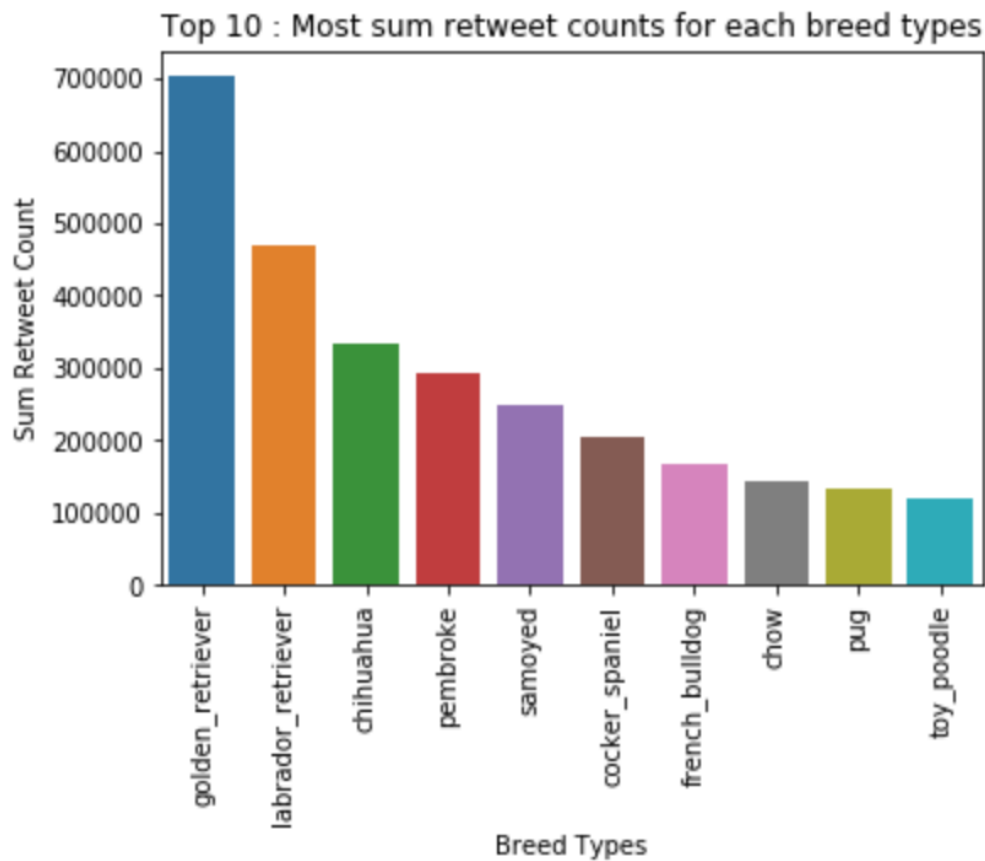
### Analyze :

- Most popularity breed types and dog stages

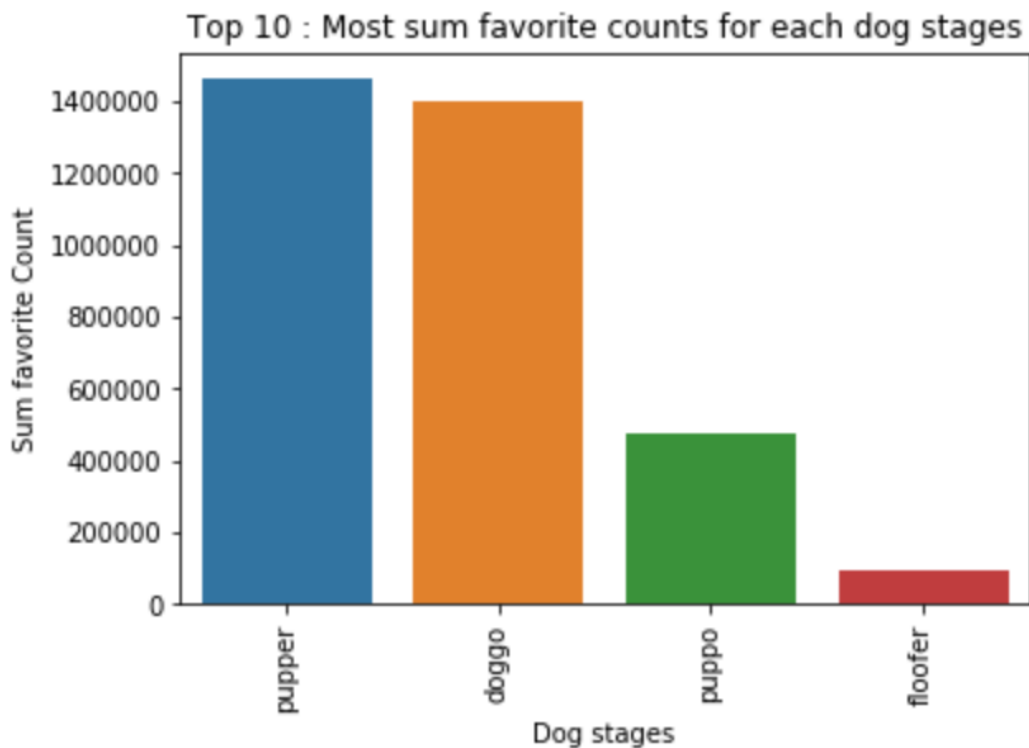
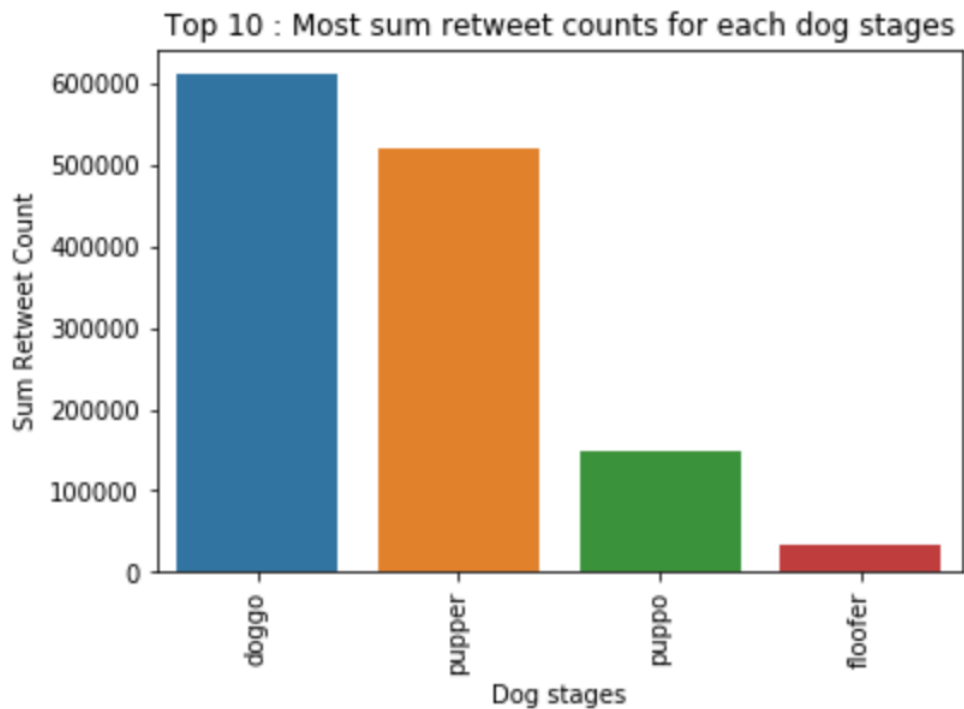


We will see that the most number of WeRateDog's posts are Golden retriever at around 175 posts and followed by Labrador at around 115 posts and followed by Pembroke (type of Corgi) and Chihuahua in the same numbers at around 90 posts and followed

by other dogs that lower than 75 posts and if we look at total retweet and favorite counts for each types we will get



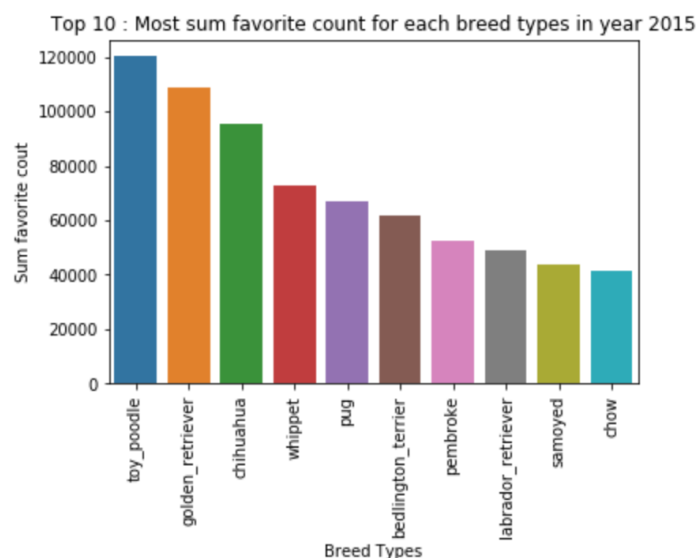
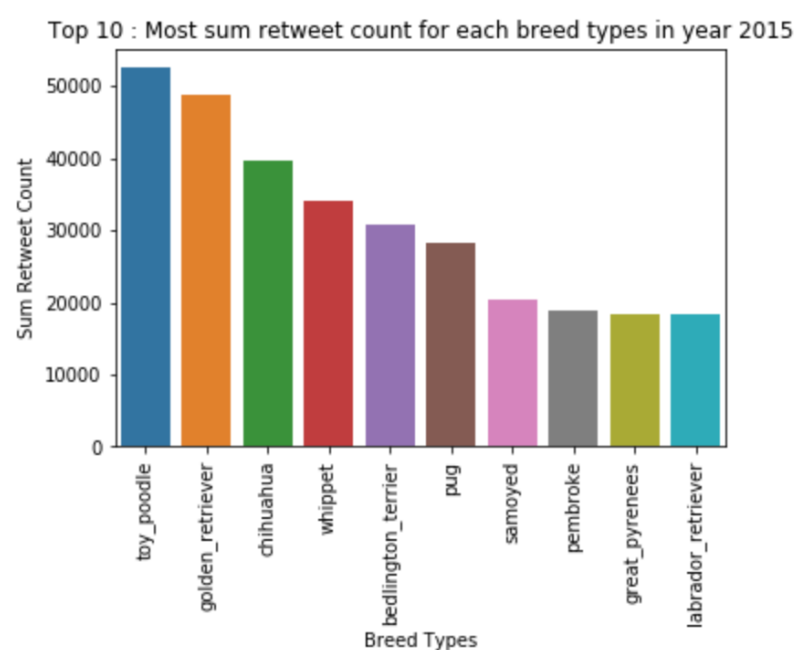
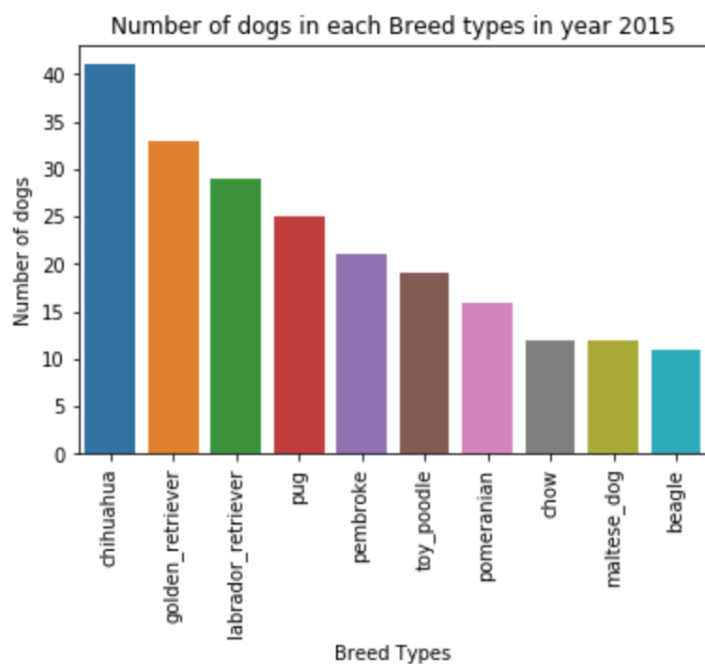
We will see that Golden retriever still have the most total retweet and favorite counts so Golden retriever is the most popularity dog type and this is the total retweet and favorite counts results for each dog stages



Doggo have the most total retweet and favorite counts at around 600,000 and 1,400,000 counts and followed by Pupper at around 530,000 and 1,350,000 counts and followed by Puppo and Floofer that have less than 200,000 retweet counts and less than 600,000 favorite counts so Doggo is the most popularity dog stage.

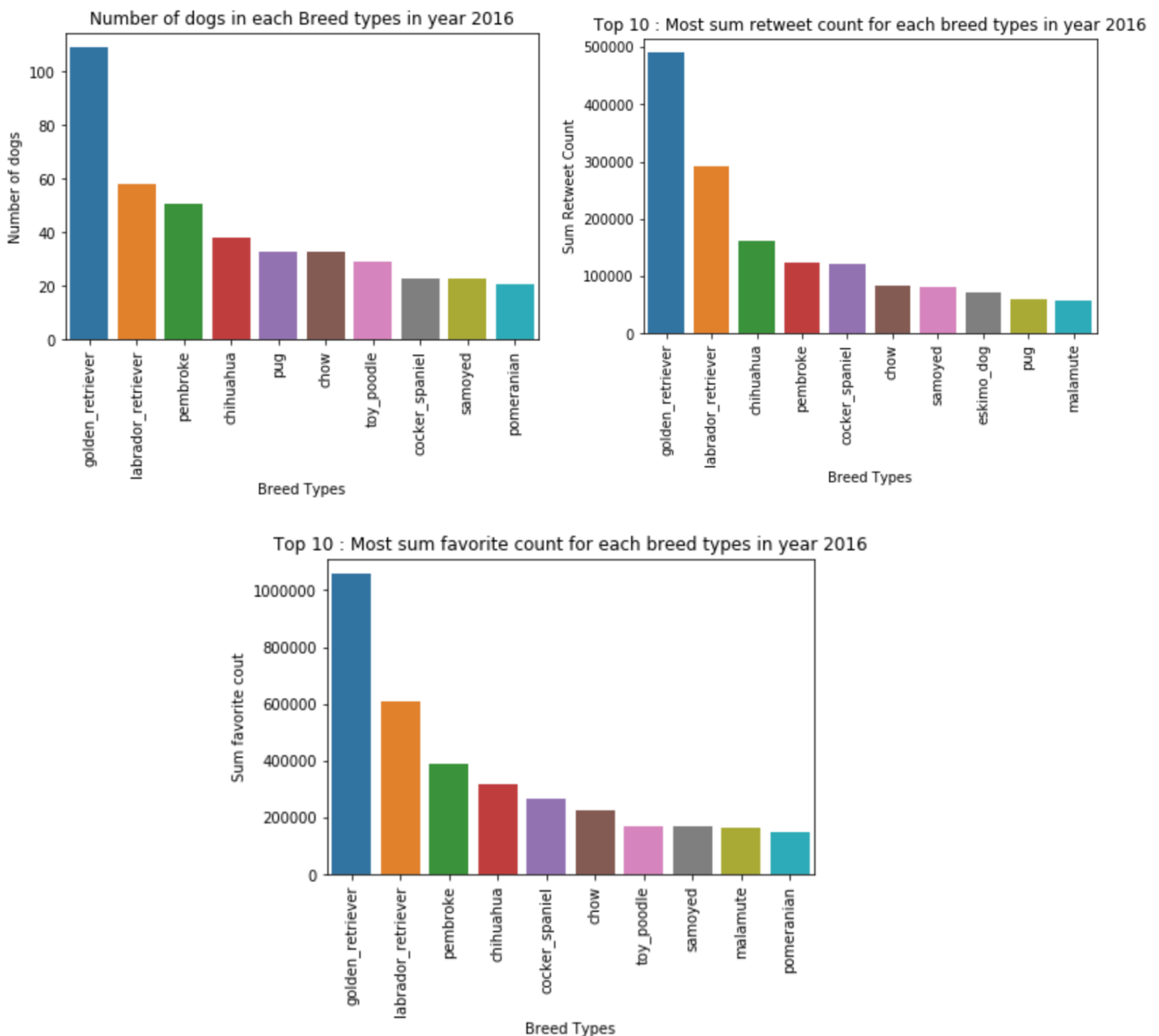
- Trends of popularity breed types in each years

From previous question, I looked at each year to find the most popularity breed types and this is result for year 2015

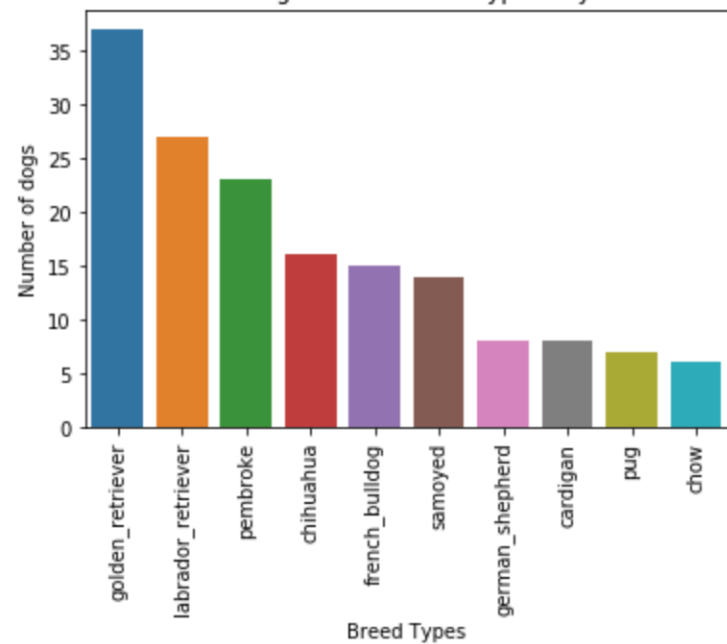


For year 2015, the most number of breed types that are posted is Chihuahua, followed by Golden retriever, followed by Labrador retriever and followed by the others but the breed types that have the most retweet and favorite counts is Toy Poodle that are posted less than Chihuahua around two times so in year 2015 so the most popularity is Toy Poodle

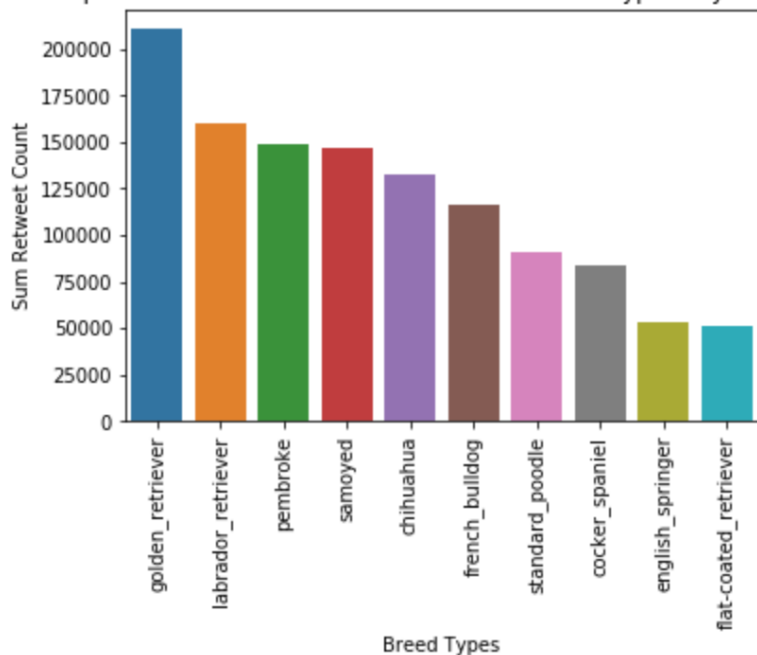
And this is result for year 2016 and 2017



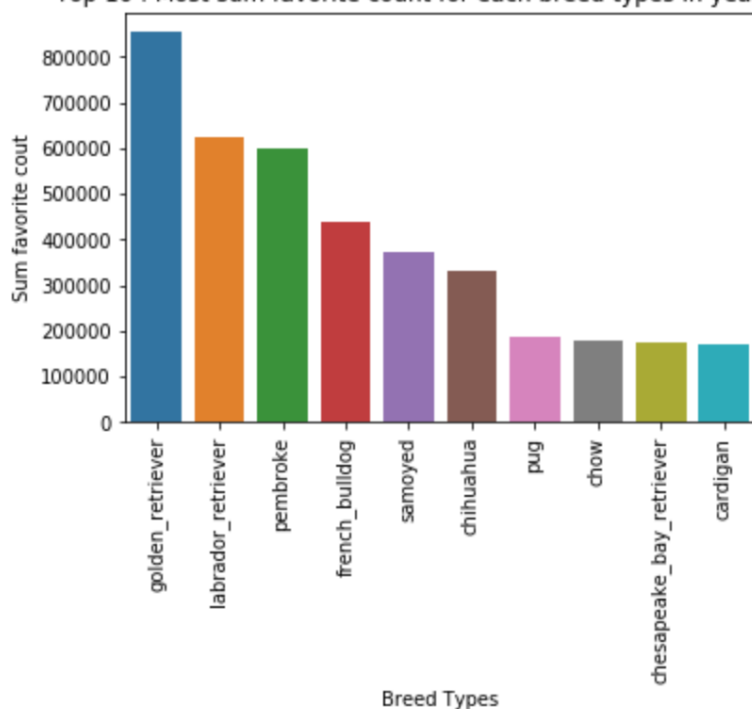
Number of dogs in each Breed types in year 2017



Top 10 : Most sum retweet count for each breed types in year 2017



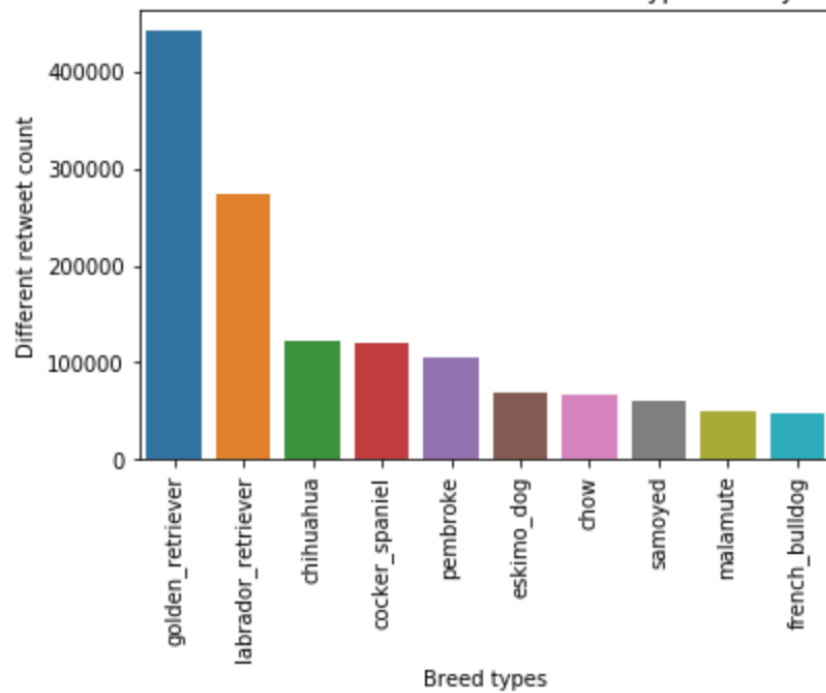
Top 10 : Most sum favorite count for each breed types in year 2017



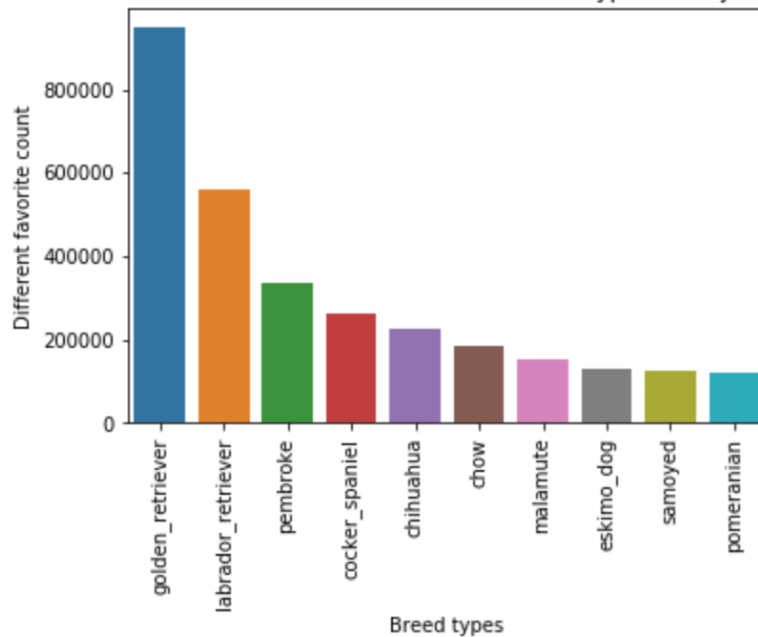
For year 2016 and 2017, Golden retriever is the most popularity in all terms (number of posts, retweet counts and favorite counts) while Toy Poodle (old champion) is 7th in term of number of posts and favorite counts and not in Top 10 for retweet counts for year 2016 and not in Top 10 in all terms in year 2017

And I also try to find the most increased retweet and favorite counts for year 2015-2016 and 2016-2017 and this is result of year 2015-2016

Top 10 : Most increase retweet counts for each Breed types from year 2015 to 2016

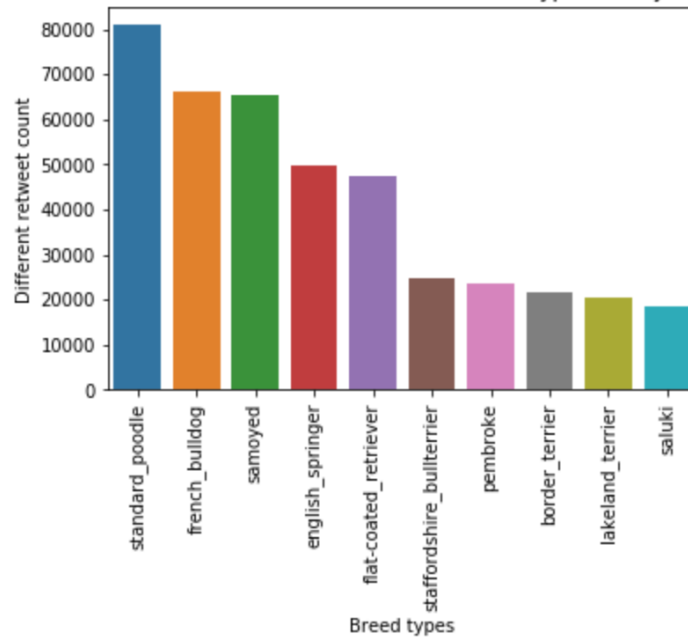


Top 10 : Most increase favorite counts for each Breed types from year 2015 to 2016

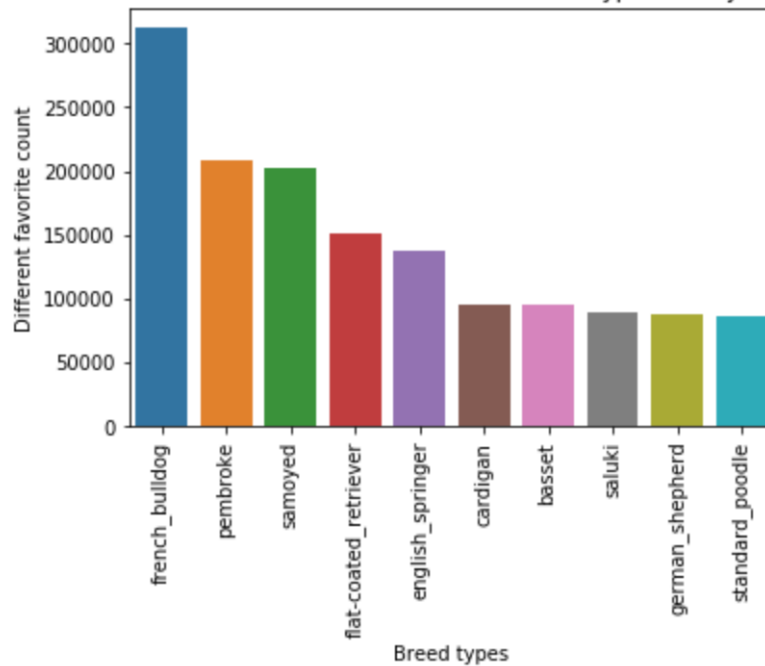


Golden is the most increased in term of both total retweet and favorite counts but if we look at year 2016-2017

Top 10 : Most increase retweet counts for each Breed types from year 2016 to 2017



Top 10 : Most increase favorite counts for each Breed types from year 2016 to 2017

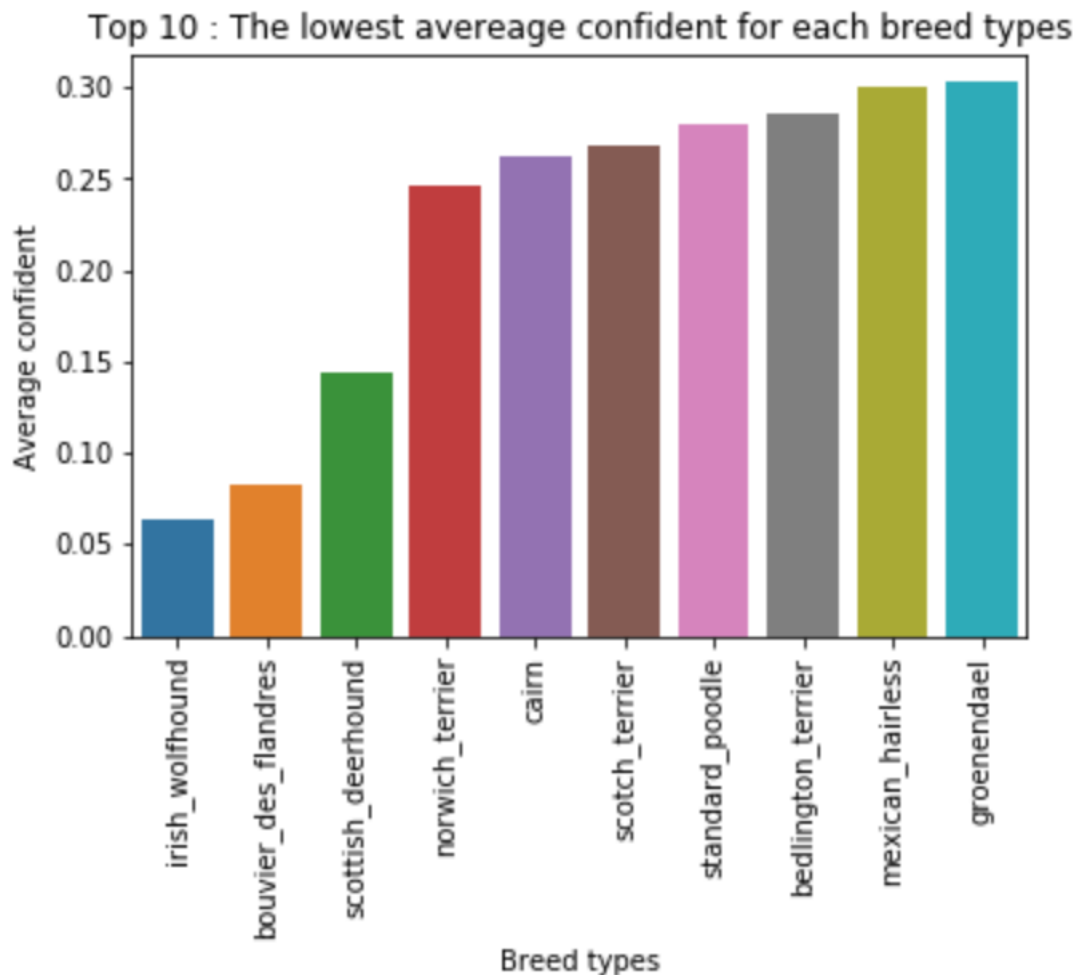


French bulldog is the most increased favorite counts more than 300,000 counts, followed by Pembroke and Samoyed at around 200,000 counts and for retweet counts, the most increased retweet counts is Standard Poodle at around 80,000 counts, followed by French bulldog and Samoyed at around 65,000 counts so French bulldog and Samoyed are interesting and should be post more times.



- The lowest confident for each breed types

I want to know which breed types pictures that we should add more to train Neural Network model so this is a result.



Irish wolfhounds have the lowest confidence to predict, it's around 6%, followed by Bouvier Des Flandres at around 8% and it has 59 breed types that are less than 50% from 113 breed types.