Analysis, visualization, and Insights
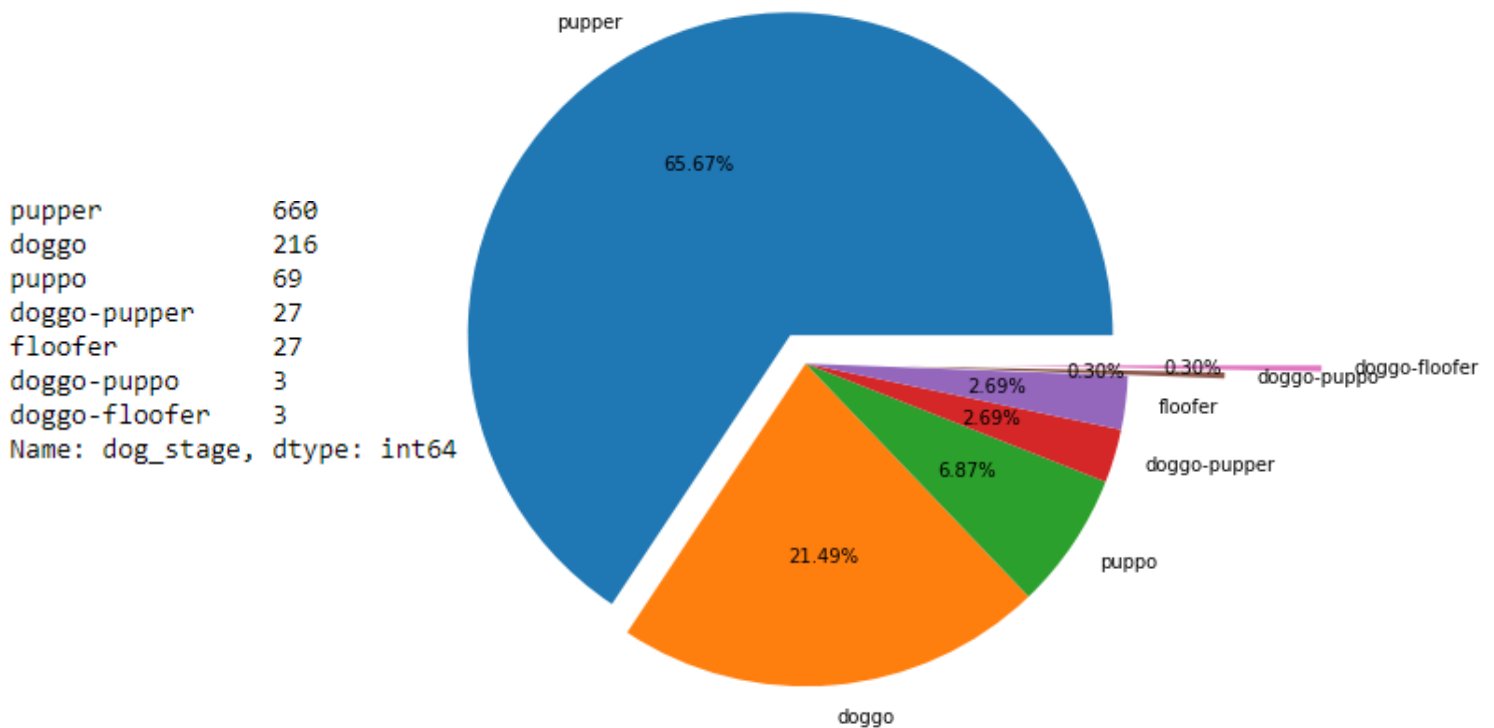
Here are some visualizations and insights about what I came across in the 'twitter_archive_master' Dataframe.

1- dog stage popularity

```
pupper           660
doggo            216
puppo             69
doggo-pupper      27
floofer           27
doggo-puppo        3
doggo-floofer      3
Name: dog_stage, dtype: int64
```


Insight:

`pupper` is the most popular type with about 65.7 percent frequency and it gets the most reactions from users, which means that users prefer tiny and adorable dogs, then comes the *'doggo'* type with about 21.5 percent frequency, although this analysis might not be true since there are missing data.
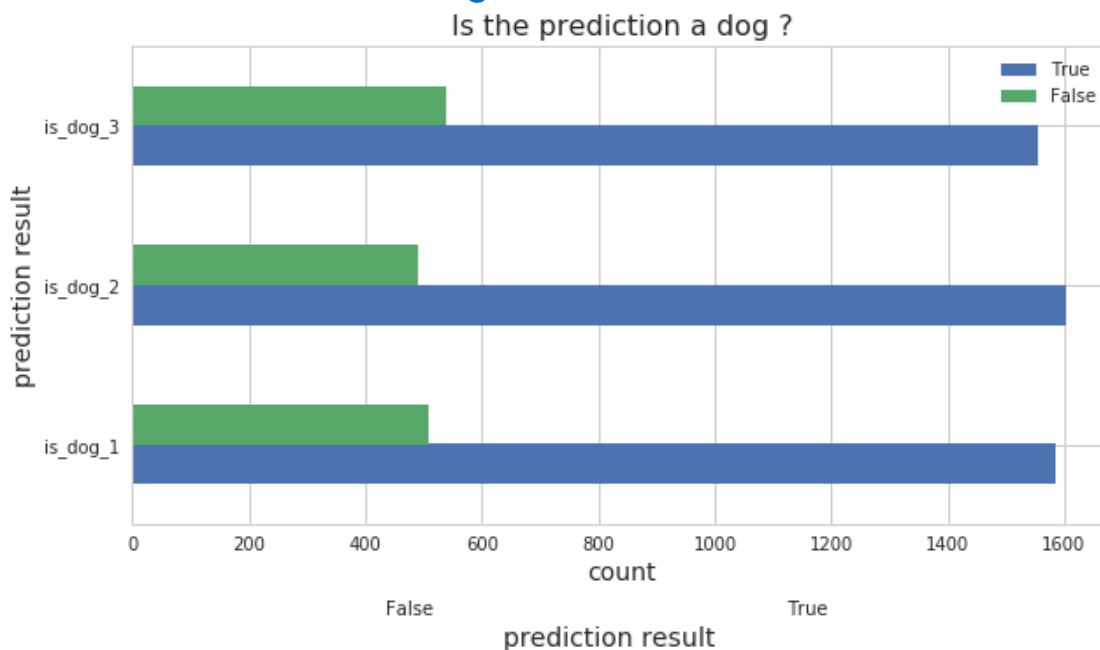
2- retweet and favorite relation
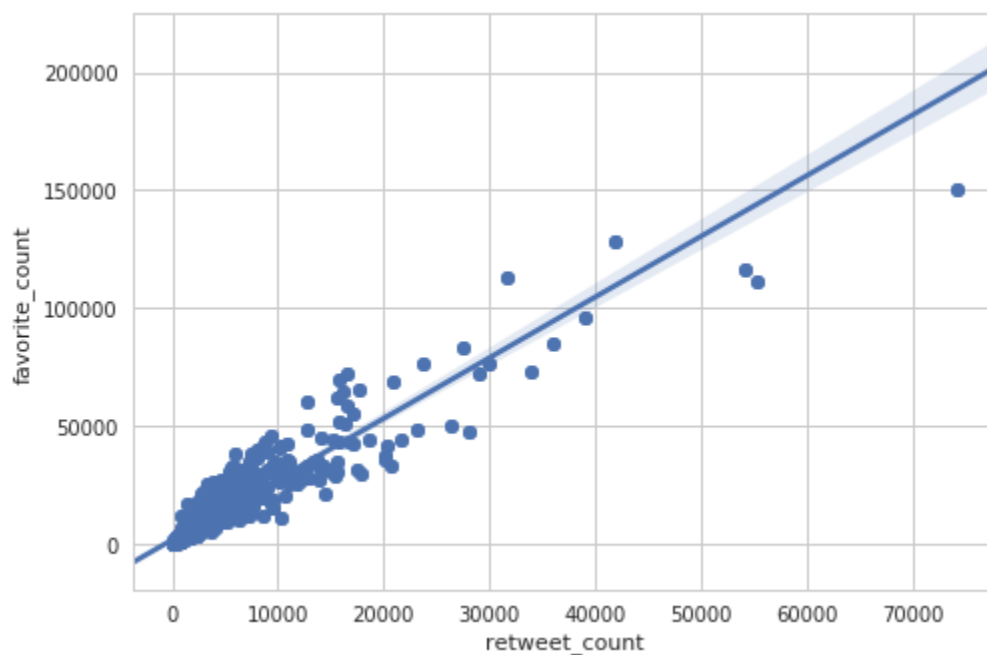
Insight:

There is a positive correlation between retweet and favorite count, which means most people who retweets tend to also favorite the tweet, and that is kind of predicted since most twitter users tend to interact with tweets in both ways.
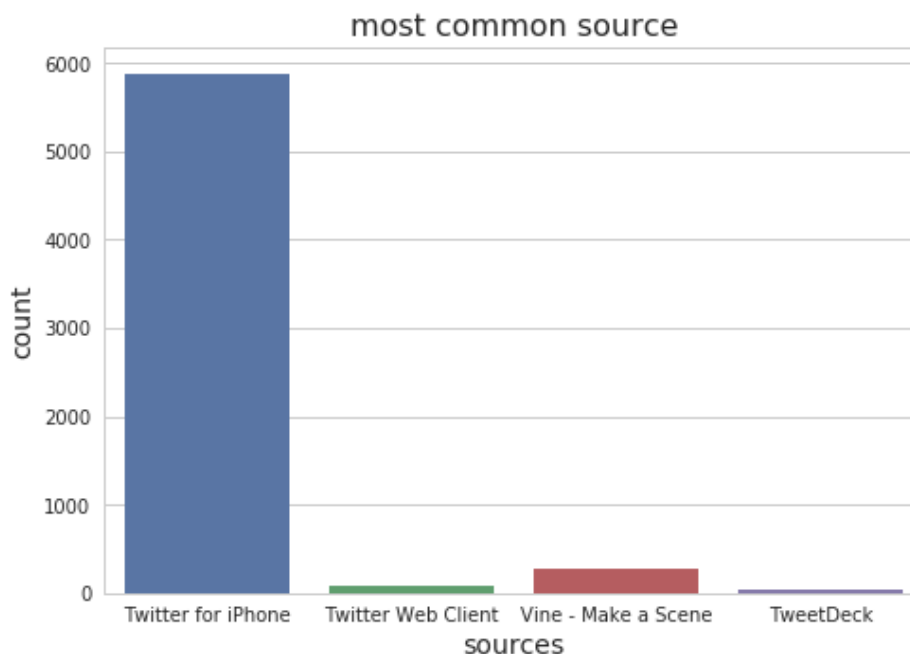
3- tweets about / not about dogs

insight:

According to the three prediction levels provided by the neural network, most tweets were about dogs, and about one third were not, which may indicate that not all the tweets posted by this account are related to dogs.
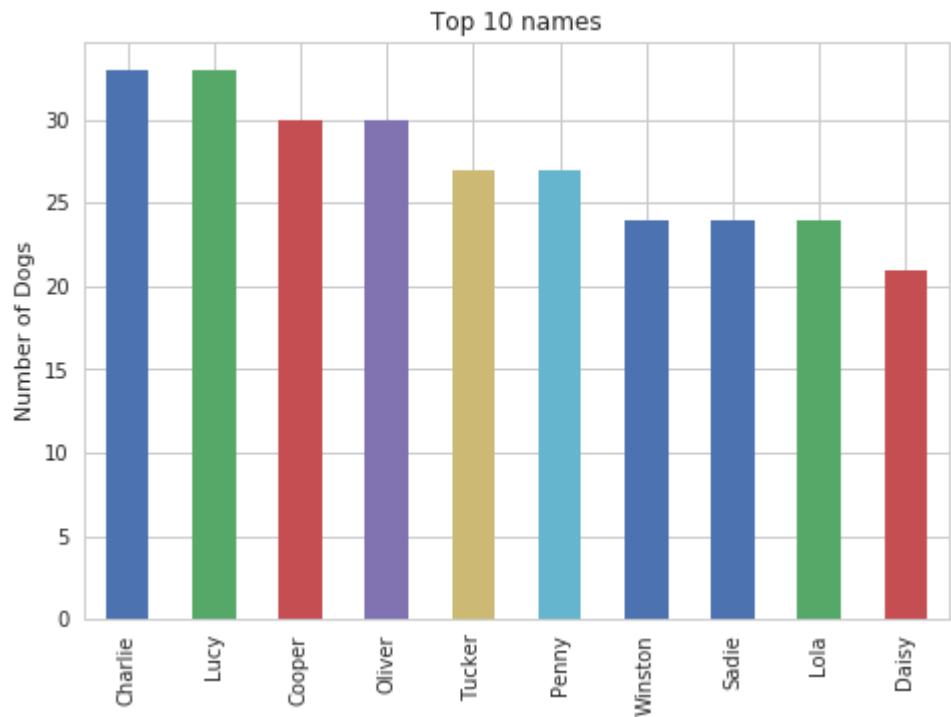
4- most common source

Insight:

'Twitter for iPhone' is the most used source, which means most users interact with posts via twitter app, other sources such as *'Twitter Web Client', 'Vine'* or *'TweetDeck'* are very not common in comparison.

5- Top 10 dog names


```
Lucy        33
Charlie     33
Cooper      30
Oliver      30
Tucker      27
Penny       27
Lola        24
Winston     24
Sadie       24
Daisy       21
Name: name, dtype: int64
```
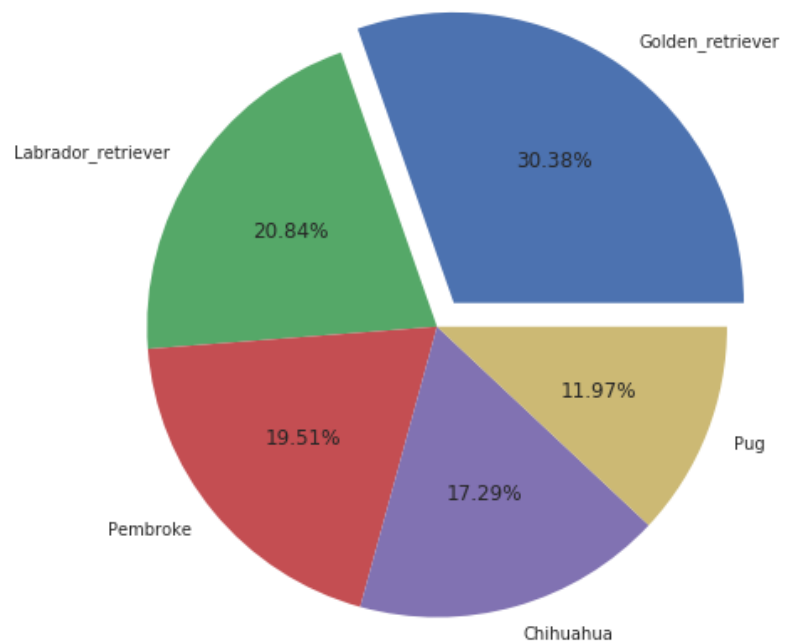
insight:

Apparently, 'Charlie' and 'Lucy' have the highest frequency with 33 times frequency, then comes *'Cooper'* and *'Oliver'* with 30 times for each, and the last most frequent name is *'Daisy'* with 21 times occurrence.

6- Top 5 common dog kinds


```
Golden_retriever     137
Labrador_retriever   94
Pembroke             88
Chihuahua            78
Pug                  54
Name: prediction_1, dtype: int64
```

insight:

About 30.4 percent of the posted dogs were of Golden retriever kind, and about 20.8 percent were of Labrador retriever, this means that the retriever kind is so popular among dog adopters.