## As we will display multiple images, we need to import image to display them

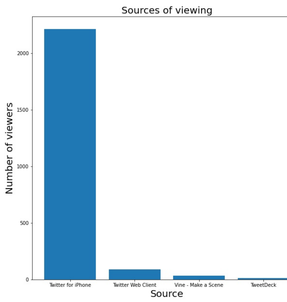
In [1]:
```
from IPython.display import Image
```

## Sources of Viewing:

we have 4 sources of viewing these tweets. after cleaning the sources column, we are able to compare the sources according to the number of viewers.

In [2]:
```
Image(filename='sources.jpg')
```

Out[2]:



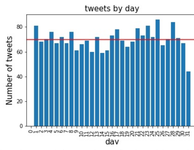

Twitter for iPhone is the most used source with a very wide margin. then the web client. The visualization is very predictable. but for me, I did not except such a difference between iPhone and web. This data can be used to improve the mobile website / application quality. The developers are actually developing for mobile. then the rest come next!

## Tweets by day:

Let us move to a different visualization, which results is completely unpredictable - at least for me-. after cleaning the timestamp column and changing its type. we can analyze the number of tweets by a certain day of month.

In [3]:
```
Image(filename='tweets.jpg')
```

Out[3]:



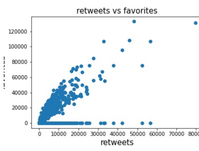

A very large margin between the very first day and the very last day! It is kind of weird! the admin seems to take it as a break.

## Tweets VS Favorites:

What is the relationship between the two? It is quite predictable. But visualizing it makes it clearer.

In [4]:
```
Image(filename='ret-favs.jpg')
```

Out[4]:




The relationship has some linearity. But it behaves weirdly in some points. Check the top-most two points! The top-most one has less then 50,000 retweets. While the second top-most which has little smaller favorites. Has about 80,000 retweets! This is very curious you must have guessed that I searched for these very tweets at once! I got their IDs using the code below and opened them. The one with more retweets was a doggo standing in the pool! Which is something worth sharing. While the one with more loves is something that many people do not seem to see that it worth retweeting. Even if they loved it!

## Here's the tweet with most retweets! I'd like myself to retweet it!

In [ ]:
```

```

In [5]:
```
Image(filename='Pic1.png')
```

Out[5]:


## Here's the tweet with less retweets!

In [6]:
```
Image(filename='Pic2.png')
```

Out[6]:


### this code is used to find these two images

```
df_all_cleaned["favorite_count"].sort_values(ascending = False)

df_all_cleaned["retweet_count"].sort_values(ascending = False)

df_all_cleaned.iloc[411]

df_all_cleaned.iloc[1035]
```

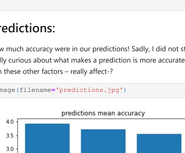
In [ ]:
```

```

## Predictions:

How much accuracy were in our predictions! Sadly, I did not start learning neural networks yet. But I was really curious about what makes a prediction is more accurate than the other beside the technical factors. Can these other factors – really affect-?

In [6]:
```
Image(filename='predictions.jpg')
```

Out[6]:



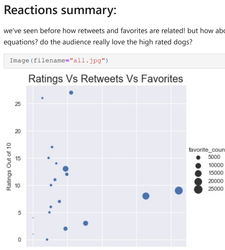

When we look at the means chart `the bar chart` : In my opinion, it is a coincidence, the three are arranged from 1 to 3. But the difference does not seem to effect in such a way to make us curious about it.

## Reactions summary:

we've seen before how retweets and favorites are related! but how about adding the ratings to the equations? do the audience really love the high rated dogs?

In [15]:
```
Image(filename="all.jpg")
```

Out[15]:




After removing some outliers! checking the graph tells us that only retweets and favorites are related. while ratings are not necessarily not