## Untitled

## December 12, 2020

## 1 Analysis

```
In [11]: import pandas as pd
         import matplotlib.pyplot as plt
In [12]: df_master = pd.read_csv('twitter_archive_master.csv')
In [13]: df_master.head()
Out[13]:
            Unnamed: 0
                                            in_reply_to_status_id in_reply_to_user_id
                                  tweet_id
                     0 892420643555336193
                                                               NaN
                                                                                     NaN
         1
                     1 892177421306343426
                                                               NaN
                                                                                     NaN
         2
                     2 891815181378084864
                                                               NaN
                                                                                     NaN
         3
                     3 891689557279858688
                                                               NaN
                                                                                     NaN
                     4 891327558926688256
                                                               NaN
                                                                                     NaN
                      tweet_timestamp
           2017-08-01 16:23:56 +0000
         1 2017-08-01 00:17:27 +0000
         2 2017-07-31 00:18:03 +0000
         3 2017-07-30 15:58:51 +0000
         4 2017-07-29 16:00:24 +0000
                                                        source \
         0 <a href="http://twitter.com/download/iphone" r...</pre>
         1 <a href="http://twitter.com/download/iphone" r...</pre>
         2 <a href="http://twitter.com/download/iphone" r...</pre>
         3 <a href="http://twitter.com/download/iphone" r...</pre>
         4 <a href="http://twitter.com/download/iphone" r...
                                                    tweet_text
                                                               retweeted_status_id
         O This is Phineas. He's a mystical boy. Only eve...
                                                                                 NaN
         1 This is Tilly. She's just checking pup on you...
                                                                                NaN
         2 This is Archie. He is a rare Norwegian Pouncin...
                                                                                 NaN
         3 This is Darla. She commenced a snooze mid meal...
                                                                                 NaN
         4 This is Franklin. He would like you to stop ca...
                                                                                 NaN
            retweeted_status_user_id retweeted_status_timestamp
```

```
NaN
                                                                NaN
         1
         2
                                   NaN
                                                                NaN
         3
                                   NaN
                                                                NaN
         4
                                   NaN
                                                                NaN
           dog_rating_out_of_ten
                                   rating_denominator
                                                        dog_name dog_category img_num
         0
                                                     10
                                                          Phineas
                                                                           None
                                                                                     NaN
         1
                               13
                                                     10
                                                            Tilly
                                                                           None
                                                                                     1.0
         2
                                                           Archie
                                                                           None
                                                                                     1.0
                               12
                                                     10
         3
                                                            Darla
                               13
                                                     10
                                                                           None
                                                                                    {\tt NaN}
         4
                               12
                                                         Franklin
                                                                           None
                                                                                    2.0
                                                     10
            dog_breed_prediction prediction_confidence
                                                                                 timestamp
         0
                              NaN
                                                           Tue Aug 01 16:23:56 +0000 2017
         1
                        Chihuahua
                                                0.323581
                                                           Tue Aug 01 00:17:27 +0000 2017
         2
                        Chihuahua
                                                0.716012
                                                           Mon Jul 31 00:18:03 +0000 2017
                                                      NaN Sun Jul 30 15:58:51 +0000 2017
         3
                              NaN
         4
                           basset
                                                0.555712 Sat Jul 29 16:00:24 +0000 2017
           favorites
                      retweets
               39467
         0
                           8853
         1
               33819
                           6514
         2
               25461
                           4328
         3
               42908
                           8964
               41048
                           9774
         [5 rows x 21 columns]
In [14]: df_master.tail()
Out[14]:
               Unnamed: 0
                                       tweet_id in_reply_to_status_id \
         2075
                      2075
                            666049248165822465
                                                                     NaN
         2076
                      2076
                            666044226329800704
                                                                     NaN
         2077
                      2077
                            666033412701032449
                                                                     NaN
         2078
                      2078 666029285002620928
                                                                     NaN
         2079
                      2079 666020888022790149
                                                                     NaN
               in_reply_to_user_id
                                                tweet_timestamp
         2075
                                      2015-11-16 00:24:50 +0000
                                {\tt NaN}
         2076
                                NaN
                                      2015-11-16 00:04:52 +0000
         2077
                                NaN 2015-11-15 23:21:54 +0000
         2078
                                {\tt NaN}
                                      2015-11-15 23:05:30 +0000
         2079
                                {\tt NaN}
                                      2015-11-15 22:32:08 +0000
         2075 <a href="http://twitter.com/download/iphone" r...
         2076 <a href="http://twitter.com/download/iphone" r...
```

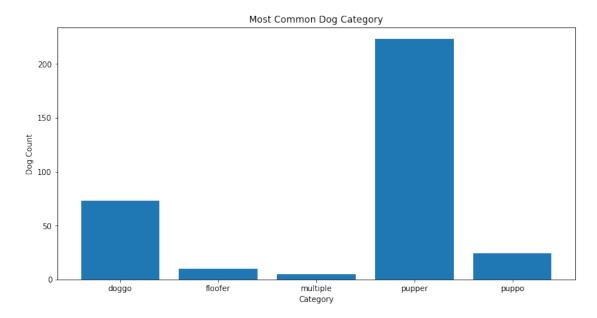
NaN

NaN

0

```
2078 <a href="http://twitter.com/download/iphone" r...
         2079 <a href="http://twitter.com/download/iphone" r...
                                                        tweet_text retweeted_status_id \
         2075
               Here we have a 1949 1st generation vulpix. Enj...
                                                                                      NaN
         2076
               This is a purebred Piers Morgan. Loves to Netf...
                                                                                     {\tt NaN}
         2077 Here is a very happy pup. Big fan of well-main...
                                                                                     NaN
         2078 This is a western brown Mitsubishi terrier. Up...
                                                                                     NaN
         2079 Here we have a Japanese Irish Setter. Lost eye...
                                                                                     NaN
               retweeted_status_user_id retweeted_status_timestamp
         2075
                                     NaN
                                                                   NaN
         2076
                                     NaN
                                                                   NaN
         2077
                                     NaN
                                                                   NaN
         2078
                                     NaN
                                                                   NaN
                                                                          . . .
         2079
                                     NaN
                                                                   NaN
                                                                          . . .
              dog_rating_out_of_ten
                                     rating_denominator
                                                           dog_name dog_category img_num \
         2075
                                                       10
                                                               None
                                                                             None
                                                                                       1.0
                                   5
         2076
                                   6
                                                       10
                                                                             None
                                                                                       1.0
         2077
                                                                             None
                                                                                       1.0
                                   9
                                                       10
                                   7
         2078
                                                       10
                                                                   a
                                                                             None
                                                                                       1.0
         2079
                                                               None
                                                                             None
                                   8
                                                       10
                                                                                       1.0
                 dog_breed_prediction prediction_confidence
         2075
                   miniature_pinscher
                                                     0.560311
                  Rhodesian_ridgeback
         2076
                                                     0.408143
         2077
                       German_shepherd
                                                     0.596461
         2078
                               redbone
                                                     0.506826
         2079
               Welsh_springer_spaniel
                                                     0.465074
                                     timestamp favorites
                                                           retweets
         2075 Mon Nov 16 00:24:50 +0000 2015
                                                      111
                                                                 41
         2076 Mon Nov 16 00:04:52 +0000 2015
                                                                 147
                                                      311
         2077 Sun Nov 15 23:21:54 +0000 2015
                                                                 47
                                                      128
         2078
               Sun Nov 15 23:05:30 +0000 2015
                                                                 48
                                                      132
         2079
               Sun Nov 15 22:32:08 +0000 2015
                                                     2535
                                                                 532
         [5 rows x 21 columns]
In [17]: df_master.dog_category.value_counts()
Out[17]: None
                      1744
                       223
         pupper
         doggo
                        73
                        24
         puppo
         floofer
                        10
```

<a href="http://twitter.com/download/iphone" r...



```
Out [20]: count
                  2080.000000
         mean
                     11.683173
                    39.814228
         std
         min
                     0.000000
         25%
                     10.000000
         50%
                     11.000000
         75%
                     12.000000
                  1776.000000
         max
         Name: dog_rating_out_of_ten, dtype: float64
In [21]: df_master.dog_breed_prediction.value_counts()
```

In [20]: df\_master.dog\_rating\_out\_of\_ten.describe()

Ω <sub>11</sub> + [21] ·	golden_retriever	134
ouc[21].	Labrador_retriever	91
	Pembroke	88
	Chihuahua	78
	pug	54
	chow	41
	Samoyed	40
	Pomeranian	38
	toy_poodle	37
	malamute	29
	cocker_spaniel	27
	French_bulldog	26
	Chesapeake_Bay_retriever	23
	miniature_pinscher	21
	German_shepherd	20
	Siberian_husky	19
	Staffordshire_bullterrier	19
	Shetland_sheepdog	18
	Eskimo_dog	18
	Maltese_dog	17
	beagle	17
	Shih-Tzu	17
	Cardigan	17
	Italian_greyhound	16
	Rottweiler	16
	kuvasz	15
	Lakeland_terrier	15
	vizsla	13
	basset	13
	Pekinese	13
	Norwich_terrier	4
	bluetick	4
	Mexican_hairless	4
	Weimaraner	4
	Brabancon_griffon	3
	Scottish_deerhound	3
	Welsh_springer_spaniel	3
	Irish_water_spaniel	3
	curly-coated_retriever	3
	Ibizan_hound	3
	komondor	3
	Leonberg	3
	Afghan_hound	3
	cairn	3
	briard	3
	${\tt Greater\_Swiss\_Mountain\_dog}$	3
	Appenzeller	2

```
Sussex_spaniel
                                 2
giant_schnauzer
                                 2
Australian_terrier
                                 2
toy_terrier
                                 2
wire-haired_fox_terrier
                                 2
                                 2
black-and-tan_coonhound
groenendael
                                 1
standard_schnauzer
Scotch_terrier
Japanese_spaniel
                                 1
clumber
                                 1
silky_terrier
                                 1
{\tt EntleBucher}
                                 1
```

Name: dog\_breed\_prediction, Length: 111, dtype: int64

## 2 Insights

The most popular dog type is a "pupper"

The most popular dog, based on image predictions, is a Golden Retriever he median and mean ratings out of ten are 11 and 11.7 respectively

In []: