

# act\_report

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## 1 Analyzing and Visualizing Data

By Abdullah Saud AlFawwaz

```
In [1]: # Packages
```

```
import tweepy
import pandas as pd
import numpy as np
import requests
import json
import matplotlib.pyplot as plt
import seaborn as sns
% matplotlib inline
```

```
In [2]: # Read from copied csv file for analyzing
```

```
tweets_data= pd.read_csv('twitter_archive_master.csv')
```

```
tweets_data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1994 entries, 0 to 1993
Data columns (total 16 columns):
Unnamed: 0      1994 non-null int64
tweet_id       1994 non-null int64
text           1994 non-null object
retweet        1992 non-null float64
favorite        1992 non-null float64
name           1380 non-null object
stage          306 non-null object
rating_numerator 1994 non-null int64
rating_denominator 1994 non-null int64
timestamp      1994 non-null object
prediction      1994 non-null object
confidence      1994 non-null float64
Dog?           1994 non-null bool
```

```

jpg_url          1994 non-null object
source           1994 non-null object
expanded_urls     1994 non-null object
dtypes: bool(1), float64(3), int64(4), object(8)
memory usage: 235.7+ KB

```

### 1.0.1 Famous and lovely Dogs at WeRateDogs

- Let's see who are the famous dogs in WeRateDogs which have a top retweet.
- Also we will see who are the lovely dogs that the people like it by display dogs favorite.

#### Top 10 of Famous Dogs:

```
In [4]: top_dog_retweets = tweets_data.sort_values(by='retweet', ascending =False ).head(10)
```

```

top_dog_retweets[['name', 'stage', 'retweet', 'text', 'jpg_url']]
#pd.reset_option('display.max_rows')

#pd.set_option('display.max_colwidth', -1)

```

```

Out[4]:
      name  stage  retweet  \
1718  NaN     doggo   83356.0
1728  NaN     doggo   61721.0
1037  Stephan  NaN    60783.0
1975  NaN     puppo   47539.0
166   Duddles  NaN    43308.0
1717  Bo      doggo   39937.0
1036  NaN     NaN    38112.0
1867  Jamesy   pupper  35323.0
917   NaN     NaN    33667.0
868   Kenneth  NaN    32499.0

```

```

1718  Here's a doggo realizing you can stand in a pool. 13/10 enlightened af (vid by Tim
1728  Here's a doggo blowing bubbles. It's downright legendary. 13/10 would watch on rep
1037  This is Stephan. He just wants to help. 13/10 such a good boy https://t.co/DkBYaCA
1975  Here's a super supportive puppo participating in the Toronto #WomensMarch today.
166   This is Duddles. He did an attempt. 13/10 someone help him (vid by Georgia Felici)
1717  This is Bo. He was a very good First Doggo. 14/10 would be an absolute honor to pe
1036  "Good afternoon class today we're going to learn what makes a good boy so good" 13
1867  This is Jamesy. He gives a kiss to every other pupper he sees on his walk. 13/10 s
917   This made my day. 12/10 please enjoy https://t.co/VRTbo3aAcm
868   This is Kenneth. He's stuck in a bubble. 10/10 hang in there Kenneth https://t.co/

```

```

1718  https://pbs.twimg.com/ext_tw_video_thumb/744234667679821824/pu/img/1GaWmtJtdqzZV7j
1728  https://pbs.twimg.com/ext_tw_video_thumb/739238016737267712/pu/img/-tLpyiuIzD5zR1e

```

```
1037 https://pbs.twimg.com/ext_tw_video_thumb/807106774843039744/pu/img/8XZg1xW35Xp2J6J
1975 https://pbs.twimg.com/media/C2tugXLXgAARJ04.jpg
166 https://pbs.twimg.com/ext_tw_video_thumb/879415784908390401/pu/img/cX7XI1TnUsseGET
1717 https://pbs.twimg.com/media/C12whDoVEAALRxa.jpg
1036 https://pbs.twimg.com/media/CzG425nWgAAnP7P.jpg
1867 https://pbs.twimg.com/media/DAZAUFbXcAAG_Nn.jpg
917 https://pbs.twimg.com/ext_tw_video_thumb/678399528077250560/pu/img/B0jUNHRsYLeSo0h
868 https://pbs.twimg.com/media/CWJqN9iWwAAg86R.jpg
```

```
In [5]: from PIL import Image
import requests
from io import BytesIO
```

```
response = requests.get('https://pbs.twimg.com/ext_tw_video_thumb/744234667679821824/pu/
img = Image.open(BytesIO(response.content))
```

```
img
```

```
#sources "https://stackoverflow.com/questions/7391945/how-do-i-read-image-data-from-a-u
```

```
Out [5]:
```



Hi there, I am the top one Famous Dog in WeRateDogs, I have more than 83K retweet, my stage is doggo, I will not tell you my name right now

### Top 10 of Lovely Dogs:

```
In [6]: top_dog_favorite = tweets_data.sort_values(by='favorite', ascending=False).head(10)
```

```
top_dog_favorite[['name', 'stage', 'retweet', 'favorite', 'text', 'jpg_url']]
```

```
Out [6]:
```

	name	stage	retweet	favorite	\
1718	NaN	doggo	83356.0	163903.0	
1975	NaN	puppo	47539.0	140063.0	
1037	Stephan	NaN	60783.0	126742.0	
1867	Jamesy	pupper	35323.0	121681.0	
1728	NaN	doggo	61721.0	121088.0	
166	Duddles	NaN	43308.0	103786.0	
1717	Bo	doggo	39937.0	91971.0	
1309	quite	NaN	30663.0	90490.0	
917	NaN	NaN	33667.0	82235.0	
1294	Zoey	NaN	26014.0	81769.0	

```
1718 Here's a doggo realizing you can stand in a pool. 13/10 enlightened af (vid by Tim
1975 Here's a super supportive puppo participating in the Toronto #WomensMarch today.
1037 This is Stephan. He just wants to help. 13/10 such a good boy https://t.co/DkBYaCA
1867 This is Jamesy. He gives a kiss to every other pupper he sees on his walk. 13/10 s
1728 Here's a doggo blowing bubbles. It's downright legendary. 13/10 would watch on rep
166 This is Duddles. He did an attempt. 13/10 someone help him (vid by Georgia Felici)
1717 This is Bo. He was a very good First Doggo. 14/10 would be an absolute honor to pe
1309 We only rate dogs. This is quite clearly a smol broken polar bear. We'd appreciate
917 This made my day. 12/10 please enjoy https://t.co/VRTbo3aAcm
1294 This is Zoey. She really likes the planet. Would hate to see willful ignorance and
```

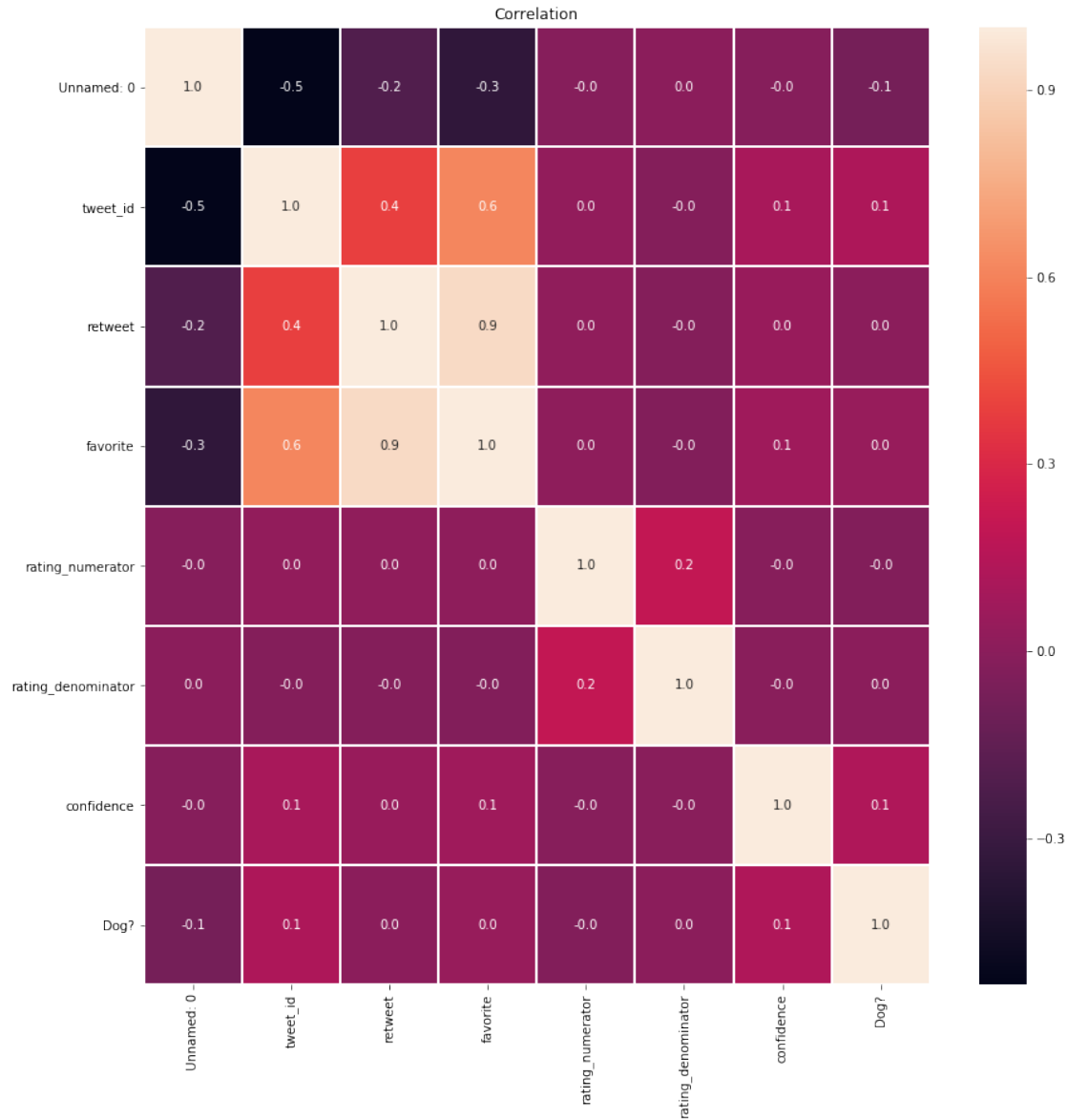
```

jp
1718 https://pbs.twimg.com/ext_tw_video_thumb/744234667679821824/pu/img/1GaWmtJtdqzZV7j
1975 https://pbs.twimg.com/media/C2tugXLXgAARJ04.jpg
1037 https://pbs.twimg.com/ext_tw_video_thumb/807106774843039744/pu/img/8XZg1xW35Xp2J6J
1867 https://pbs.twimg.com/media/DAZAUfBXcAAG_Nn.jpg
1728 https://pbs.twimg.com/ext_tw_video_thumb/739238016737267712/pu/img/-tLpyiuIzD5zR1e
166 https://pbs.twimg.com/ext_tw_video_thumb/879415784908390401/pu/img/cX7XI1TnUsseGET
1717 https://pbs.twimg.com/media/C12whDoVEAALRxa.jpg
1309 https://pbs.twimg.com/ext_tw_video_thumb/859196962498805762/pu/img/-yBpr4-o4GJZECY
917 https://pbs.twimg.com/ext_tw_video_thumb/678399528077250560/pu/img/BOjUNHRsYLeSo0h
1294 https://pbs.twimg.com/media/DBQwlFCXkAACSkI.jpg
```

As we see from the list above, The top one retweet dog have top favorite also, that's mean there is correlation between retweets and favorites.

## The relationship between the variables

```
In [7]: #Correlation map
f,ax = plt.subplots(figsize=(14, 14))
sns.heatmap(tweets_data.corr(), annot=True, linewidths=1, fmt= '.1f',ax=ax)
plt.title('Correlation')
plt.show();
```



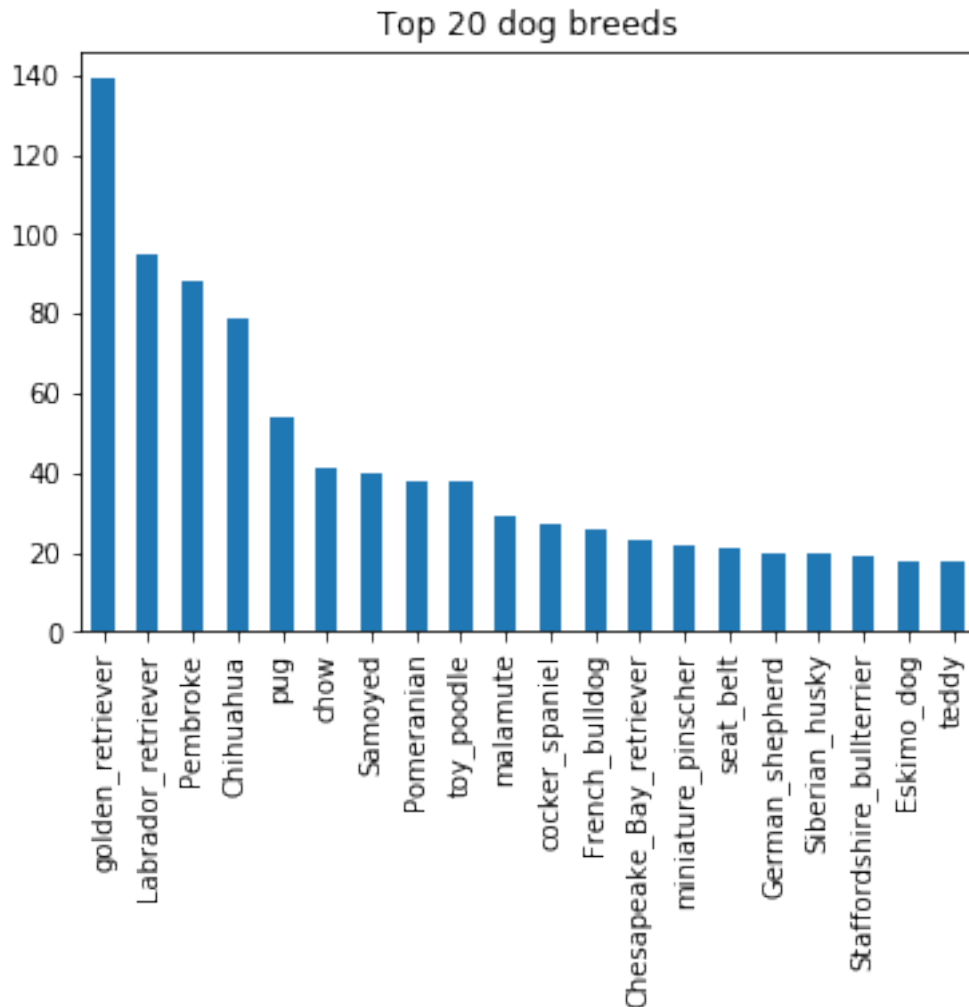
From the correlation map there is a strong correlation between favorites and retweets.

### 1.0.2 Top dog breeds in the tweets based on prediction data:

```
In [8]: #Top dog breeds in the tweets based on prediction data
```

```
top_dog_breeds= tweets_data['prediction'].value_counts().head(20)

top_dog_breeds.plot(kind='bar', title='Top 20 dog breeds')
plt.show();
```



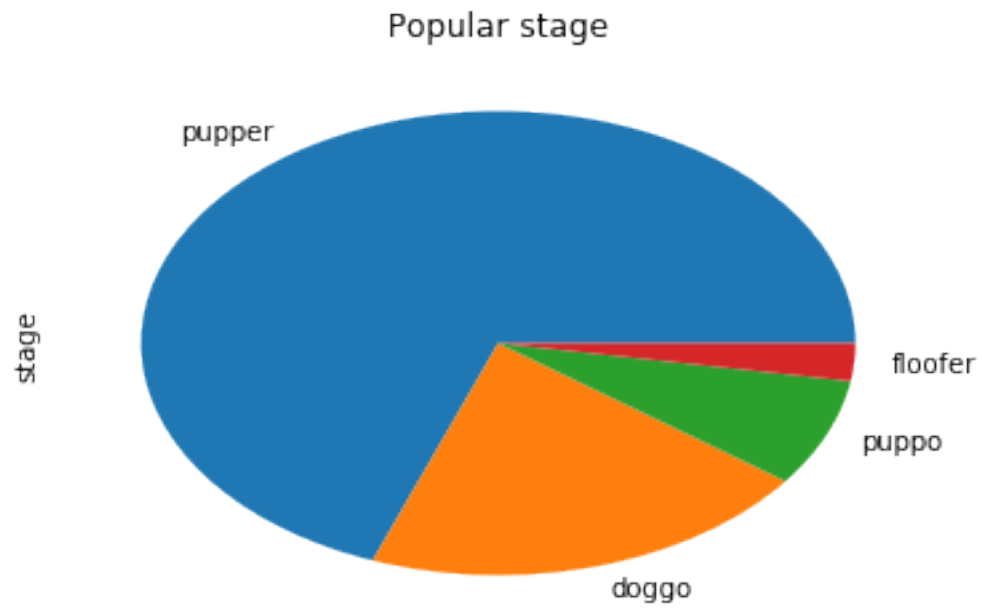
The top one on Dog breeds is golden\_retriever then Labrador\_retriever

### 1.0.3 Popular stage on the tweets

In [9]: *#Popular stage*

```
dog_stage= tweets_data['stage'].value_counts()

dog_stage.plot(kind='pie', title='Popular stage')
plt.show();
```



**Pupper represent the big number of the pie**

```
In [11]: from subprocess import call  
         call(['python', '-m', 'nbconvert', 'act_report.ipynb'])
```

```
Out[11]: 0
```

```
In [ ]:
```

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In [ ]:
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In [ ]:
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In [ ]:
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In [ ]:
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In [ ]:
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In [ ]:
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