- For my insights and visualizations, I will describe and explain each item below:
  - **First insight:**

"Which dog the highest favorite count from users?"

  - Bedlington_terrier has the highest favorite rate from WeRateDogs users although it's not the top count of breed of dog's dedicated by image:

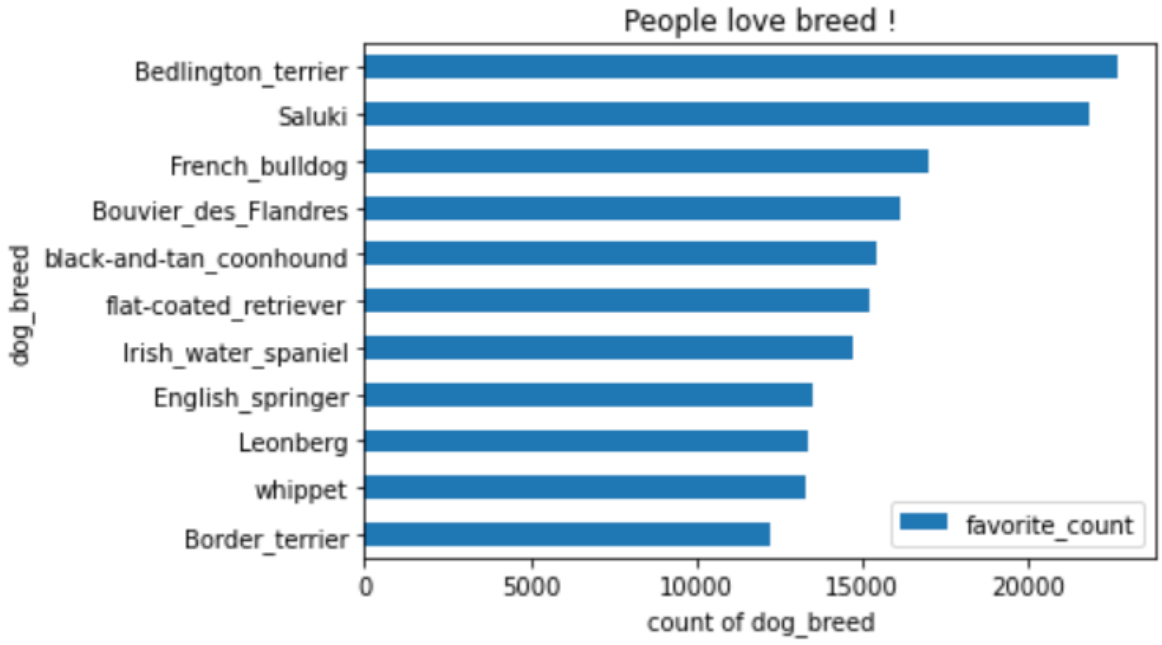
Insight number 1:

breed of dog "bedlington terrior" is the highest favorite dog breed from users

```
In [88]: breed_mean_favourite = twitter_master.groupby(['dog_breed']).favorite_count.mean().sort_values(ascending=False)[10::-1]
         breed_mean_favourite
```

```
Out[88]: dog_breed
         Border_terrier             12260.428571
         whippet                    13277.000000
         Leonberg                   13347.333333
         English_springer           13484.000000
         Irish_water_spaniel        14708.000000
         flat-coated_retriever      15226.375000
         black-and-tan_coonhound    15397.000000
         Bouvier_des_Flandres       16174.000000
         French_bulldog             16973.931034
         Saluki                     21853.750000
         Bedlington_terrier         22726.666667
         Name: favorite_count, dtype: float64
```

First visualization:



  - **Second insight:**

"Which dog breed was highly predicted from neural network?"

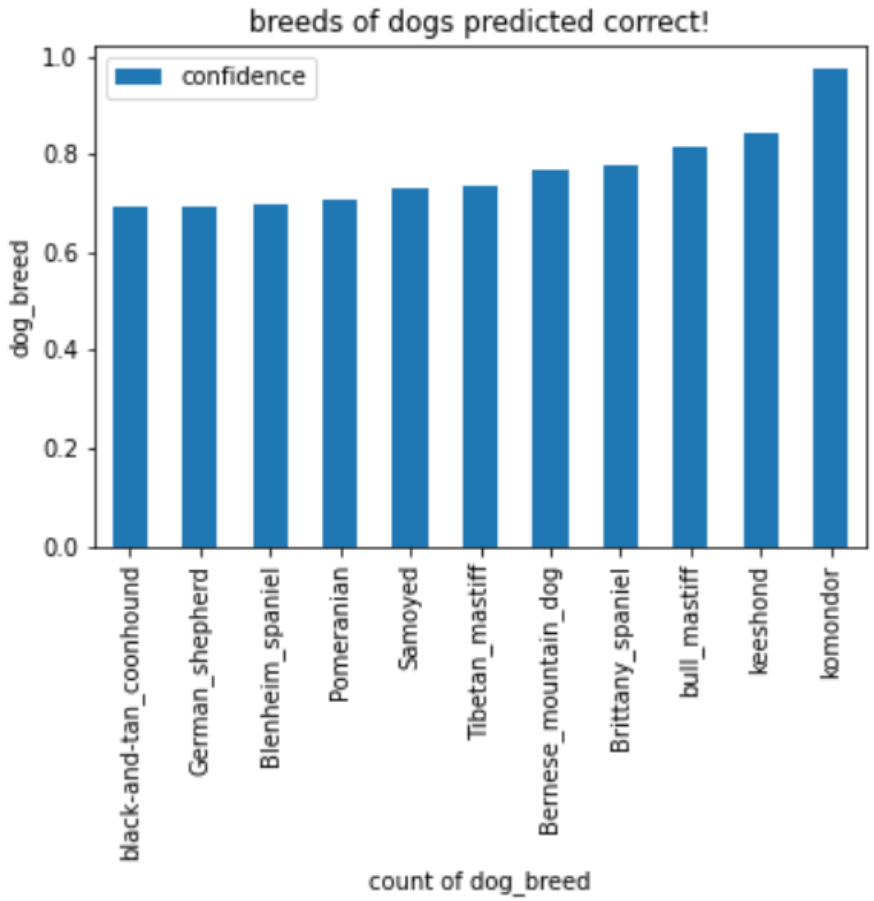
- "komondor" is the highest predicted breed

```
In [89]: dog_breed_prediction = twitter_master.groupby(['dog_breed']).confidence.mean().sort_values(ascending=False)[10::-1]

In [90]: dog_breed_prediction

Out[90]: dog_breed
         black-and-tan_coonhound    0.692000
         German_shepherd            0.694426
         Blenheim_spaniel           0.699588
         Pomeranian                 0.705332
         Samoyed                    0.728503
         Tibetan_mastiff            0.737021
         Bernese_mountain_dog       0.766685
         Brittany_spaniel           0.775591
         bull_mastiff               0.815618
         keeshond                   0.844431
         komondor                   0.972531
         Name: confidence, dtype: float64
```

- **<u>Second visualization:</u>**



- **<u>Third insight:</u>**

"Which dog type has the best rating from users?"

- Some images have more than one dog_stage like doggo-puppo which rated the best image from users

doggo-puppo is the highest top rated dog type

```
In [92]: dog_stage_rating=twitter_master.groupby(['dog_stage']).dog_rating.mean().sort_values(ascending=False)[10::-1]
```

```
In [93]: dog_stage_rating

Out[93]: dog_stage
         doggo-pupper     10.800000
         pupper           10.839506
         doggo-floofer    11.000000
         doggo            11.862745
         puppo            11.950000
         floofer          12.000000
         doggo-puppo      13.000000
         Name: dog_rating, dtype: float64
```

Third visualization: