

# Tweets analysis and graphs

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Our project only tested on OS/X. Linux and Windows are not supported.

## Description for files

getting\_tweets.py: get and store real time tweets

sava\_dataframe.py: transform tweets of current directory to dataframe

tweets\_analysis\_functions.py: convert json files to DataFrame

tweets\_analysis\_graphs.py: generates pie chart and histogram as data anlysis graphs for different tweets' attributes.

Tweets\_frame.pkl: store tweets from all files.

User\_interact.py: interaction with user.

Test.py: provides unittest for user\_interaction.py.

## pre configure

Run getting\_tweets.py to store real time tweets and save\_dataframe.py to transform stored jason file in tweets folder to data frame (we already saved the the dataframe as tweets\_frame.pkl).

## Run the program

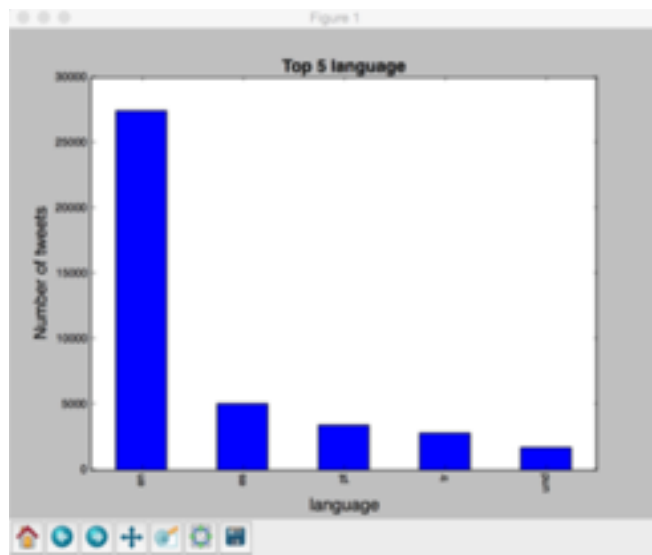
At first, please make sure you have pandas and matplotlib packages and Python3.

After download DSproject folder, then please use terminal to change your directory to this DSproject. Then please run the program.

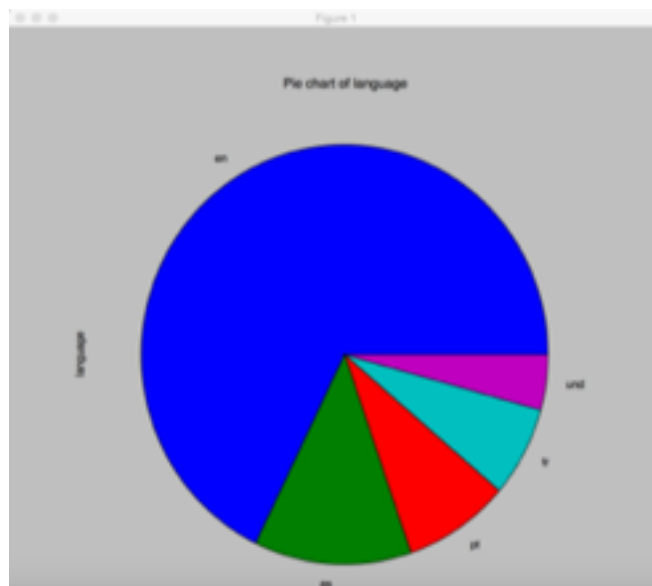
Type in something you would like to see as the instruction said ( I typed 'A'):

```
shiyans-MacBook-Pro:Desktop shiyans$ cd DSproject/
shiyans-MacBook-Pro:DSproject shiyans$ python user_interaction.py
We would like to visualize the tweets that we collected through twitter API.
Each tweet has differnt attribute such as language, city, country, ect..
We would like to ask user which attribute they would like to see.
Pie charts and histograms would be generated to represent top five of each attri
bute.
There are four differnt attributes to visualize: A.language, B.country, C.city,
D.hashtag.
For example: if you would like to choose language, you could enter 'A' or 'langu
age'.
If you would like to quit, you can enter 'quit'.
Please choose a tweet attribute that you would like to see: █
```

Then a figure would jump out which shows the top tweet attribute that you typed in the former step has how much number of tweets.



If you close this figure, then another figure would jump out which shows the pie chart of this attribute you typed.



If you close this figure again. Then you will get following instruction:

```
If you would like to quit, you can enter 'quit'.
Please choose a tweet attribute that you would like to see: A
Would you like to see the graph for top 20 elements of your selected attribute?
Please enter 'yes' or 'no' or 'quit':
```

You could type 'yes' to see the graphs for top 20 elements of selected attribute or type 'no' to not see the graph, or type 'quit' to quit the program ( if you type 'yes' you would see the following figure).

