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Step 1: Install and import tweepy library

In [1]:

```
import tweepy as tw
import numpy as np
import pandas as pd
```

Step 2: Sign up your twitter developer account and obtain the following credentials

Step 3: Using the above credentials get yourself authorized to stream real time tweets using the code snippet below

Step 4: Using the API object search tweets of your interest using a particular hashtag

In [2]:

```
df = pd.read_csv('sample.csv',encoding = 'iso-8859-1',names=['target','id','date','query
df.head()
```

Out[2]:

	target	id	date	query	name	text
0	0	1467810369	Mon Apr 06 22:19:45 PDT 2009	NO_QUERY	_TheSpecialOne_	@switchfoot http://twitpic.com/2y1zl - Awww, t...
1	0	1467810672	Mon Apr 06 22:19:49 PDT 2009	NO_QUERY	scotthamilton	is upset that he can't update his Facebook by ...
2	0	1467810917	Mon Apr 06 22:19:53 PDT 2009	NO_QUERY	mattycus	@Kenichan I dived many times for the ball. Man...
3	0	1467811184	Mon Apr 06 22:19:57 PDT 2009	NO_QUERY	ElleCTF	my whole body feels itchy and like its on fire
4	0	1467811193	Mon Apr 06 22:19:57 PDT 2009	NO_QUERY	Karoli	@nationwideclass no, it's not behaving at all....

In [45]:

```
data = df[['text','target']][799991:800011]
```

In [46]:

```
import nltk
from nltk.tokenize import RegexpTokenizer
from nltk.stem import WordNetLemmatizer,PorterStemmer
from nltk.corpus import stopwords
import re
lemmatizer = WordNetLemmatizer()
stemmer = PorterStemmer()

def preprocess(sentence):
    sentence=str(sentence)
    sentence = sentence.lower()
    sentence=sentence.replace('{html}',"")
    cleanr = re.compile('<.*?>')
    cleantext = re.sub(cleanr, '', sentence)
    rem_url=re.sub(r'http\S+', '',cleantext)
    rem_num = re.sub('[0-9]+', '', rem_url)
    tokenizer = RegexpTokenizer(r'\w+')
    tokens = tokenizer.tokenize(rem_num)
    filtered_words = [w for w in tokens if len(w) > 2 if not w in stopwords.words('engli
    stem_words=[stemmer.stem(w) for w in filtered_words]
    lemma_words=[lemmatizer.lemmatize(w) for w in stem_words]
    return " ".join(filtered_words)


data['cleanText']=data['text'].map(lambda s:preprocess(s))
```

In [47]:

```
data.head()
```

Out[47]:

	text	target	cleanText
799991	@iaintnohomo Banana will be playing later. BU...	0	iaintnohomo banana playing later shell playing...
799992	@koolgirl37 read my tweet below	0	koolgirl read tweet
799993	My life http://mattf.ca/2009/06/24/yay-me/	0	life
799994	Tried to get the mutant Fawkes to follow me bu...	0	tried get mutant fawkes follow lonely without ...
799995	Sick Spending my day laying in bed listening ...	0	sick spending day laying bed listening taylors...

Step 6: Import the networkx package

In [48]:

```
import networkx as nx
```

Step 7: First create a basic network with few nodes and edges

In [49]:

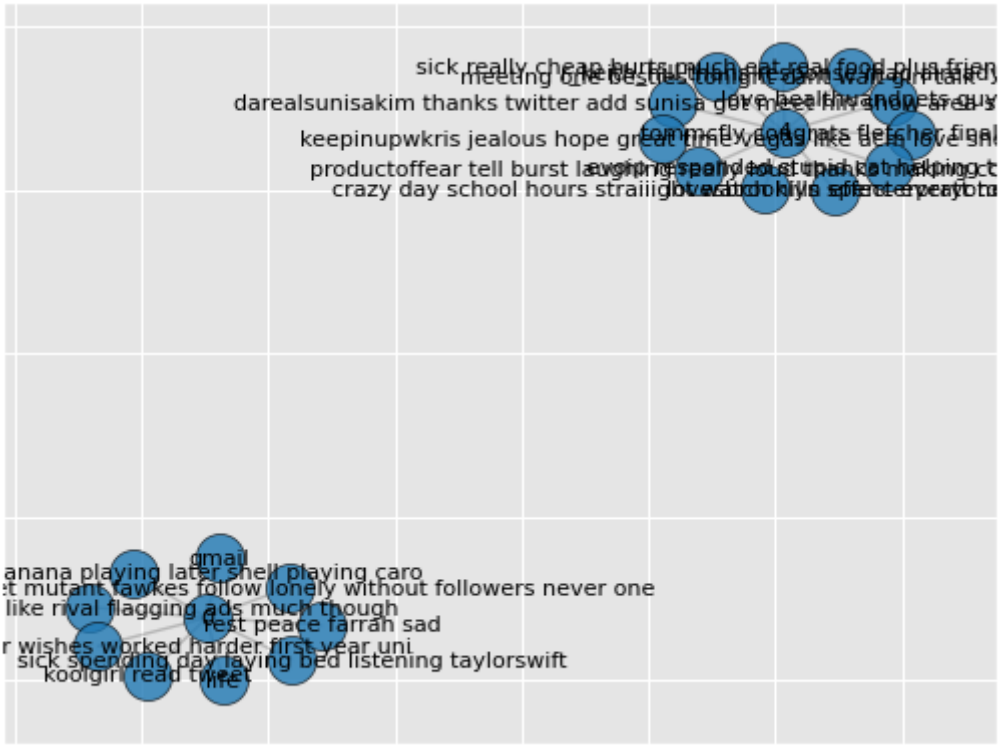
```
G = nx.from_pandas_edgelist(data,'cleanText', 'target') #Turn df into graph
pos = nx.spring_layout(G) #specify layout for visual
```

In [50]:

```
import matplotlib.pyplot as plt
f, ax = plt.subplots()
plt.style.use('ggplot')
nodes = nx.draw_networkx_nodes(G, pos,
                               alpha=0.8)
nodes.set_edgecolor('k')
nx.draw_networkx_labels(G, pos, font_size=8)
nx.draw_networkx_edges(G, pos, width=1.0, alpha=0.2)
```

Out[50]:

```
<matplotlib.collections.LineCollection at 0x23652220760>
```



In [ ]: