Plot a sentiment graph on the 1000 sample tweets

In [1]:

```
import numpy as np
import pandas as pd
from pandas.io.json import json_normalize
import pip
pip.main(['install', 'requests'])
pip.main(["install","Twitter"])
import  twitter
from twitter import Twitter
from twitter import OAuth
import matplotlib.pyplot as plt


!python -m textblob.download_corpora
from  textblob import TextBlob
```

```
Requirement already satisfied: requests in /Users/prabhatjohl/anac
onda3/lib/python3.6/site-packages
Requirement already satisfied: chardet<3.1.0,>=3.0.2 in /Users/pra
bhatjohl/anaconda3/lib/python3.6/site-packages (from requests)
Requirement already satisfied: idna<2.7,>=2.5 in /Users/prabhatjoh
l/anaconda3/lib/python3.6/site-packages (from requests)
Requirement already satisfied: urllib3<1.23,>=1.21.1 in /Users/pra
bhatjohl/anaconda3/lib/python3.6/site-packages (from requests)
Requirement already satisfied: certifi>=2017.4.17 in /Users/prabha
tjohl/anaconda3/lib/python3.6/site-packages (from requests)
Requirement already satisfied: Twitter in /Users/prabhatjohl/anaco
nda3/lib/python3.6/site-packages
[nltk_data] Downloading package brown to
[nltk_data]     /Users/prabhatjohl/nltk_data...
[nltk_data]   Package brown is already up-to-date!
[nltk_data] Downloading package punkt to
[nltk_data]     /Users/prabhatjohl/nltk_data...
[nltk_data]   Package punkt is already up-to-date!
[nltk_data] Downloading package wordnet to
[nltk_data]     /Users/prabhatjohl/nltk_data...
[nltk_data]   Package wordnet is already up-to-date!
[nltk_data] Downloading package averaged_perceptron_tagger to
[nltk_data]     /Users/prabhatjohl/nltk_data...
[nltk_data]   Package averaged_perceptron_tagger is already up-to-
[nltk_data]       date!
[nltk_data] Downloading package conll2000 to
[nltk_data]     /Users/prabhatjohl/nltk_data...
[nltk_data]   Package conll2000 is already up-to-date!
[nltk_data] Downloading package movie_reviews to
[nltk_data]     /Users/prabhatjohl/nltk_data...
[nltk_data]   Package movie_reviews is already up-to-date!
Finished.
```

In [2]:

```
ck=""
cs=""
at=""
ats=""

oauth=  OAuth(at,ats,ck,cs)
api= Twitter(auth=oauth)
```

Below code fetches the 1000 tweets regarding Blackpanther

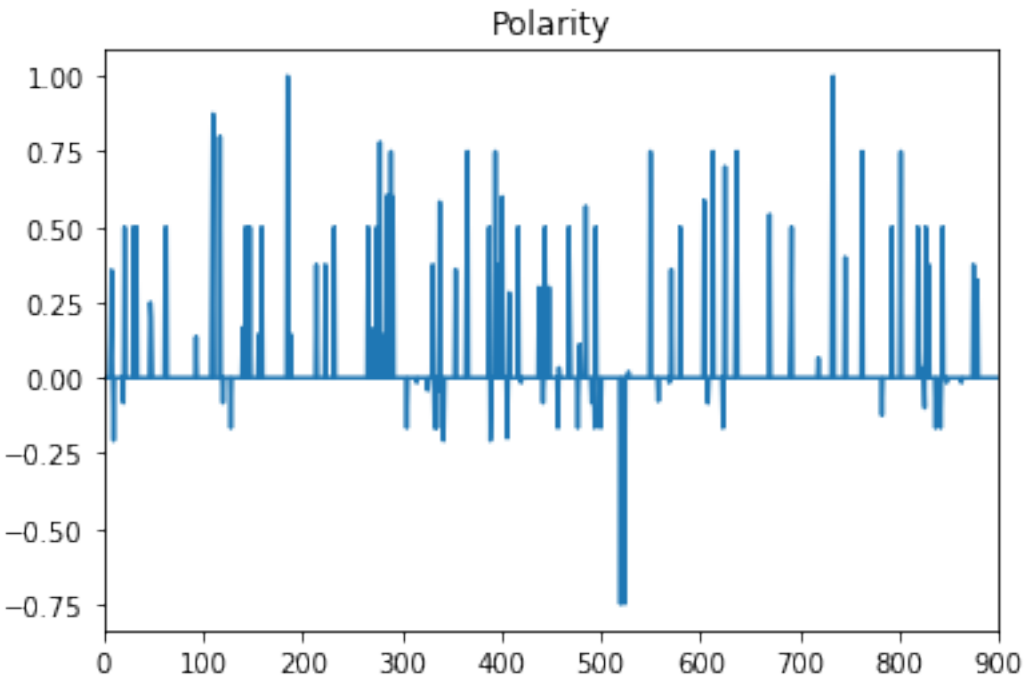
In [3]:

```
mid=0;
df=pd.DataFrame()
for i in range(10):
    if i==0:
        search_result= api.search.tweets(q="Blackpanther", count=100)
    else:
        search_result= api.search.tweets(q="Blackpanther", count=100, max_id=m
id)

        dftemp= json_normalize(search_result,'statuses')
        mid= dftemp['id'].min()
        mid=mid-1
        df=df.append(dftemp,ignore_index=True)
```

Extracting words from the tweets then evaluating the polarity and subjectivity of the each word used.

In [4]:

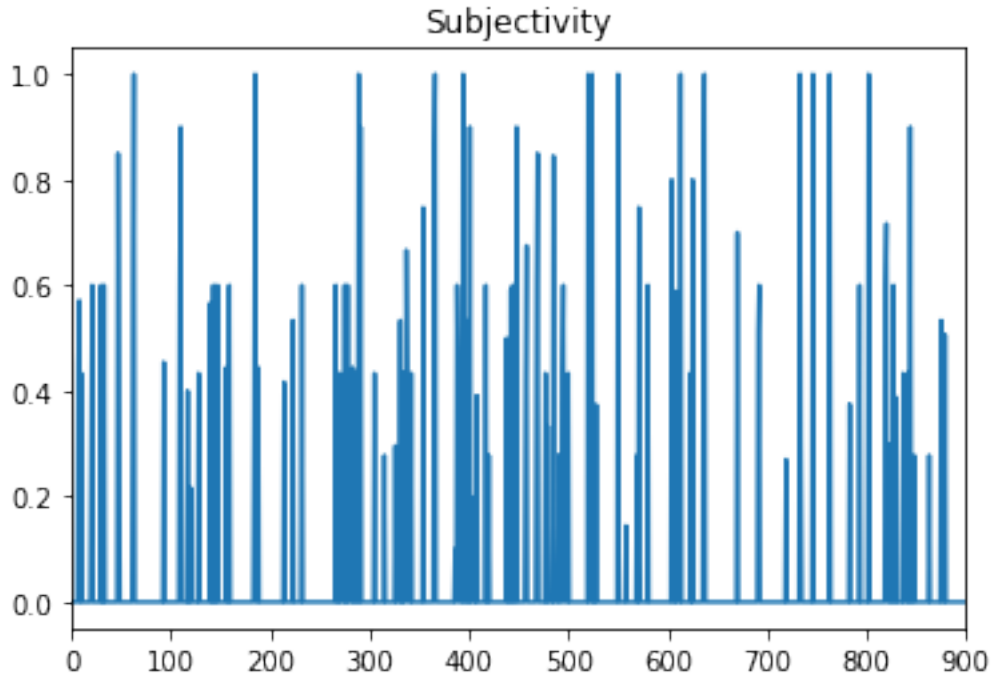
```
tweettext=df['text']

wordlist=pd.DataFrame();

polarity=[]
subj=[]

for t in tweettext:
    tx= TextBlob(t)
    polarity.append(tx.sentiment.polarity)
    subj.append(tx.sentiment.subjectivity)

poltweet= pd.DataFrame({'polarity':polarity,'subjectivity':subj})
poltweet.polarity.plot(title='Polarity')
plt.show()
```



The above graph shows the polarity of all words used in sampled 1000 tweets.

In [5]:

```
poltweet.subjectivity.plot(title='Subjectivity')
plt.show()
```

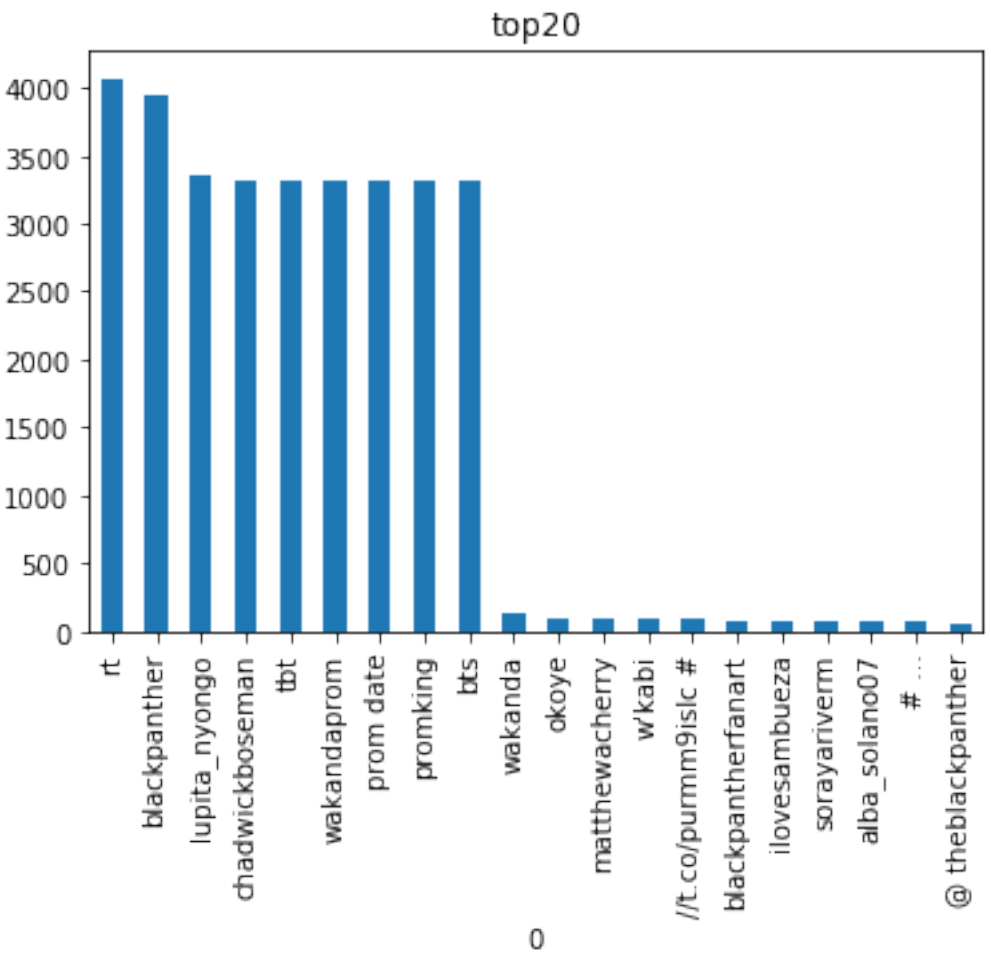


The above graph shows the subjectivity of all words used in sampled 1000 tweets.

Below code: extract and plot top 20 Nouns used in 1000 tweets:

In [7]:

```
for t in tweettext:
    tx= TextBlob(t)
    tx.tags
    for word, tag in tx.tags:
        if tag=='NN':
            l= list(tx.noun_phrases)
            if len(l)!=0:
                wordlist= wordlist.append(l, ignore_index=True)
allword=wordlist.groupby(0).size()
top20allwords=allword.sort_values(0,ascending=False).head(20)
top20allwords.plot(kind='bar',title='top20')
plt.show()
```



In [ ]:

Conclusion: Above graph shows the top 20 Nouns used by the tweeter users.