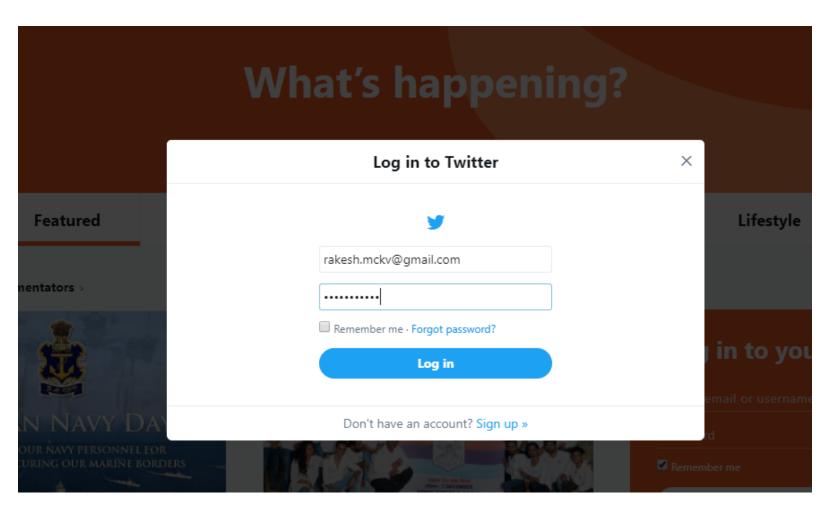
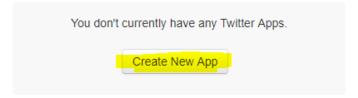
#### Problem Statement - Create a flume agent that streams data from Twitter and stores in the HDFS.

**Step-1** In order to do this we will login to Twitter account



<u>Step-2</u> Then we will go to https://apps.twitter.com/app and click the 'create new app' button.

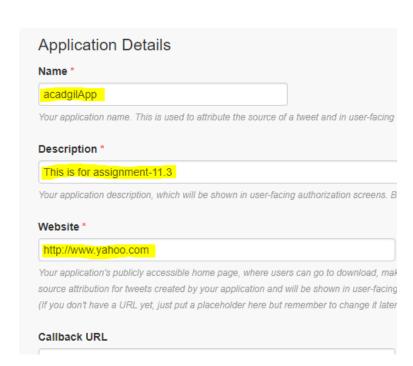
## **Twitter Apps**



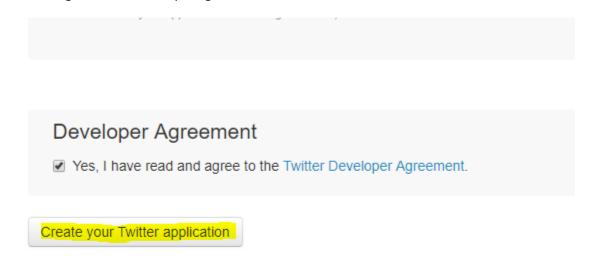
Step-3- Then we will fill up the required details as shown below-



# Create an application



Then we will agree to the developer agreement-



Step-4 Now we will click on Keys and Access Tokens tab and make a note of the Consumer Key, Consumer Secret-

# acadgilApp

Details	Settings	Keys and Access Toke	Permissions Permissions	
Application Settings Keep the "Consumer Secret" a secret. This key should never be human-readable in your application.				
Consumer Key (API Key) uae2h893ujuuNW3GdhMmJrVFW				
Consumer Secret (API Secret) LbDoQOTjAn9Qa3MvMmrzQSzdWP34pnEjUKeu6Gx4ZWuFIONTsz				
Access Level Re		Read and write (mod	Read and write (modify app permissions)	
Owner		rakeshhon		
Owner ID		704476863385640960		
Application Actions  Regenerate Consumer Key and Secret Change Ann Permissions				
Regenerate Consumer Key and Secret Change App Permissions				

Step-5- Now click on Create my access token to generate the access token-

## Your Access Token

You haven't authorized this application for your own account yet.

By creating your access token here, you will have everything you need to ma application's current permission level.



#### Status

Your application access token has been successfully generated. It may take a moment for changes you've made to reflect. Refresh if your changes are not yet indicated.

#### Step-6- Now in order to run the flume agent all HDFS services must be running-

```
[acadgild@localhost ~]$ jps
3378 SecondaryNameNode
4066 Jps
3666 NodeManager
4028 JobHistoryServer
3165 DataNode
3053 NameNode
3551 ResourceManager
[acadgild@localhost ~]$
```

#### **Step-7-** Set the class path as shown below for flume-

```
🍞 .bashrc (~) - gedit@localhost.localdomain
              File Edit View Search Tools Documents Help
                                   Save | Print | Undo Redo | Cut Copy Paste |
              New Open
                                                                      Find Replace
              export PIG_INSTALL=$HOME/pig-0.16.0
              export PATH=$PATH:$PIG_INSTALL/bin
             export PIG_CLASSPATH=$HOME/hadoop-2.7.2/sbin
              export HIVE_HOME=$HOME/apache-hive-2.1.0-bin
              export PATH=$HIVE_HOME/bin:$PATH
              export HADOOP_USER_CLASSPATH_FIRST=true
              export HBASE_HOME=$HOME/hbase-1.0.3
              export PATH=$PATH:HBASE_HOME/bin
              export SQ00P_H0ME=$H0ME/sqoop-1.4.6.bin_hadoop-2.0.4-alpha
              export PATH=$PATH:$SQ00P_HOME/bin
              export FLUME_HOME=$HOME/apache-flume-1,6.0-bin
              export PATH=$PATH:$FLUME_HOME/bin
              export PATH=$PATH:$FLUME_HOME/bin:$PATH:$SQ00P_HOME/bin:$PIG_INSTALL/bin:
             $HIVE_HOME/bin:$HBASE_HOME/bin:$HADOOP_HOME/sbin
```

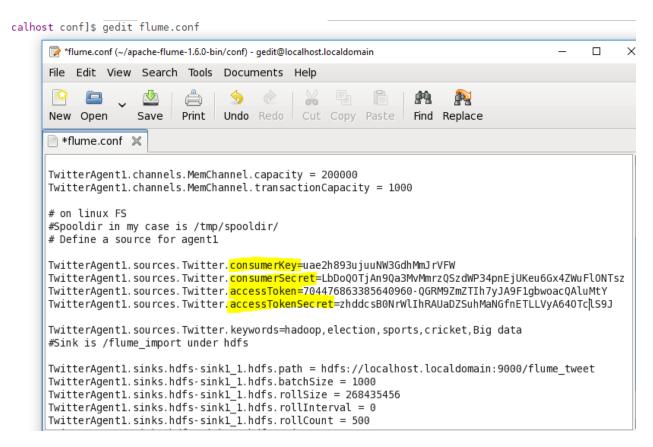
#### <u>Step-8-</u> Now we will make a file named as **twitter.conf** inside below mentioned directory-

```
[acadgild@localhost conf]$ pwd
/home/acadgild/apache-flume-1.6.0-bin/conf
[acadgild@localhost conf]$ cat > twitter.conf
[acadgild@localhost conf]$ ls -l
total 16
-rw-r--r--. 1 acadgild acadgild 1661 May 9 2015 flume-conf.properties.template
-rw-r--r--. 1 acadgild acadgild 1110 May 9 2015 flume-env.ps1.template
-rw-r--r--. 1 acadgild acadgild 1214 May 9 2015 flume-env.sh.template
-rw-r--r--. 1 acadgild acadgild 3107 May 9 2015 log4j.properties
-rw-rw-r--. 1 acadgild acadgild 0 Dec 5 15:27 twitter.conf
[acadgild@localhost conf]$
```

### **Step-9**- In order to execute flume agent below mentioned jars must be present-

```
-rw-r--r-. 1 acadgild acadgild 284077 Aug 23 2014 twitter4j-core-3.0.3.jar
-rw-r--r-. 1 acadgild acadgild 56307 Aug 23 2014 twitter4j-media-support-3.0.3.jar
-rw-r--r-. 1 acadgild acadgild 449505 Aug 23 2014 twitter4j-stream-3.0.3.jar
-rw-r--r-. 1 acadgild acadgild 3154938 Apr 18 2015 xalan-2.7.2.jar
-rw-r--r-. 1 acadgild acadgild 1229125 Aug 23 2014 xercesImpl-2.9.1.jar
-rw-r--r-. 1 acadgild acadgild 194354 Aug 23 2014 xml-apis-1.3.04.jar
-rw-r--r-. 1 acadgild acadgild 94672 Aug 23 2014 xz-1.0.jar
-rw-r--r-. 1 acadgild acadgild 64009 Aug 23 2014 zkclient-0.3.jar
[acadgild@localhost lib]$ pwd
/home/acadgild/apache-flume-1.6.0-bin/lib
[acadgild@localhost lib]$
```

<u>Step-10-</u> Now we will set the API keys such as consumer key, consumer secret key, access token, access token secret in the twitter.conf file created earlier-



Step-11- Now we will run below agent to generate the tweets mentioned as keywords in above conf file-

```
Relevant discussions can be found on the Internet at:
    http://www.google.co.jp/search?q=d0031b0b or
    http://www.google.co.jp/search?q=d0031b0b or
    http://www.google.co.jp/search?q=d0031b0b rd
interException(exceptionCode=[d0031b0b-ldb75513]
TwitterException(exceptionCode=[d0031b0b-ldb75513], statusCode=401, message=null, code=-1, retryAfter=-1, rateLimitStatus=null, version=3.0.3}
at twitter4j.internal.http.HttpClientImpl.request(HttpClientImpl.java:177)
at twitter4j.internal.http.HttpClientWrapper.request(HttpClientWrapper.java:61)
at twitter4j.internal.http.HttpClientWrapper.get(HttpClientWrapper.java:89)
at twitter4j.TwitterStreamImpl.getSampleStream(TwitterStreamImpl.java:176)
at twitter4j.TwitterStreamImpls4.getStream(TwitterStreamImpl.java:462)
17/12/05 16:08:16 INFO twitter4j.TwitterStreamImpls Waiting for 40000 milliseconds
```

#### **Step-12-**Once the data is loaded same can be found on HDFS path-

```
| Jack Strict | Market | Marke
```

P.S- Display Settings of MobaXTerm were changed in between from white to black, that is why above screenshot is showing black.