Learning Python The Hard Way: Exercise 23 - Reading Code

# Tweepy - Streaming.py

This is some source code from tweepy, python source code for accesing the Twitter API.

1. **from** tweepy.streaming **import** StreamListener
2. **from** tweepy **import** OAuthHandler
3. **from** tweepy **import** Stream
4. *# linebreak*
5. *# Go to http://dev.twitter.com and create an app.*
6. *# The consumer key and secret will be generated for you after*
7. consumer\_key**=**""
8. consumer\_secret**=**""
9. *# linebreak*
10. *# After the step above, you will be redirected to your app's page.*
11. *# Create an access token under the the "Your access token" section*
12. access\_token**=**""
13. access\_token\_secret**=**""
14. # linebreak
15. **class** **StdOutListener**(StreamListener):
16. """ A listener handles tweets are the received from the stream.
17. This is a basic listener that just prints received tweets to stdout.
18. *# linebreak*
19. """
20. **def** **on\_data**(self, data):
21. **print** data
22. **return** True
23. *# linebreak*
24. **def** **on\_error**(self, status):
25. **print** status
26. *# linebreak*
27. **if** \_\_name\_\_ **==** '\_\_main\_\_':
28. l **=** StdOutListener()
29. auth **=** OAuthHandler(consumer\_key, consumer\_secret)
30. auth**.**set\_access\_token(access\_token, access\_token\_secret)
31. *# linebreak*
32. stream **=** Stream(auth, l)
33. stream**.**filter(track**=**['basketball'])

# Reading Streaming.py

The list below is me running through the code line by line attempting to understand what each line does.

1. Imports from the library tweepy.streaming the module StreamListener
2. Imports from the library tweepy the module OAuthHandler
3. Imports from the library tweepy the module Stream
4. Is a line break
5. Is a comment that tells the user to go to http://dev.twitter.com to generate an app to use generate the codes (consumer key and secret) needed
6. Line 5 Continued
7. Creates a variable consumer\_key and sets it to a string generated from <http://dev.twitter.com>
8. Creates a variable consumer\_secret and sets it to a string generated from <http://dev.twitter.com>
9. Is a line break
10. Tells the user to after completing the above to go back to the twitter app page and create an access token
11. Line 10 continued
12. Creates variable access\_token and sets it to a string created by the user from <http://dev.twitter.com>
13. Is a linebreak
14. Performs an object orientated command from streamlistener not sure what. I think it listens to tweets and prints them.
15. Is a long string
16. See line 15
17. See line 16
18. Is a line break
19. Ends string
20. Creates function on\_data with arguments *self* and *data*.
21. Prints variable data
22. Sets self to true
23. Is a line break
24. Creates a function on\_error with the arguments *self* and *status.*
25. Prints the variable status
26. Is a line break
27. Asks if the variable \_\_name\_\_ is identical to ‘\_\_main\_\_’:
28. Set the variable l to STDOutListener()
29. Sets the variable auth to OAuthHandler with the arguments *consumer\_key* and *consumer\_secre*
30. Runs the commend set\_access\_token with the arguments *access\_token* and *access\_token\_secret*
31. Is a line break
32. Sets the variable stream to the value Stream with the arguments *auth*  and l
33. Runs the command filter (using the arugment *track* on the string ‘basketball ’ )on the variable stream

## Analysis

I think this script scans for key words in a twitter stream and prints the tweets that contain those words.