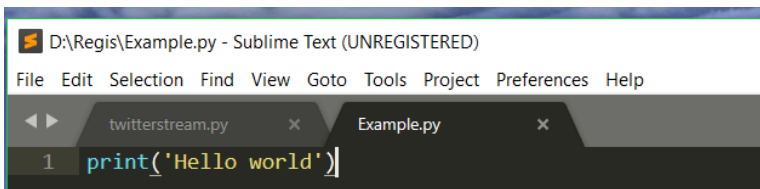


Part 1. Creating a Twitter App and configuring a Python environment that will collect tweets.

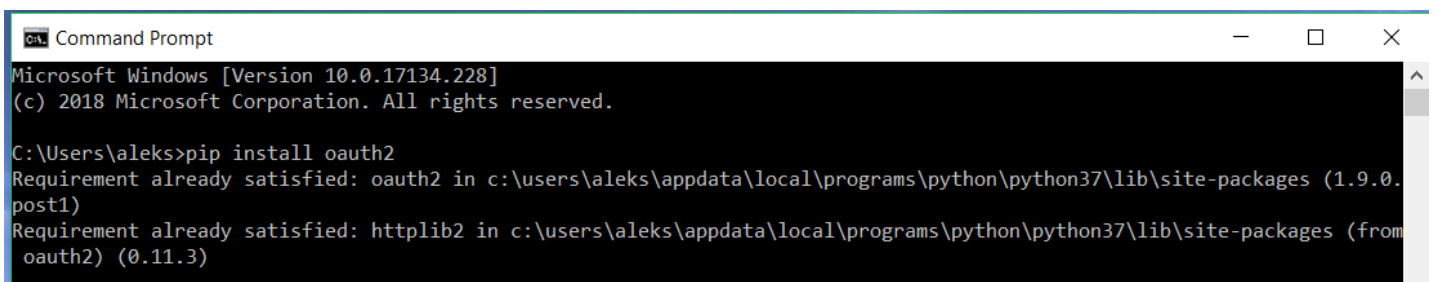
To start working on the assignment we had to install the programs like python (3.7 or 2.7) or Anaconda that has all the packages included already. I installed both.

IEDs:

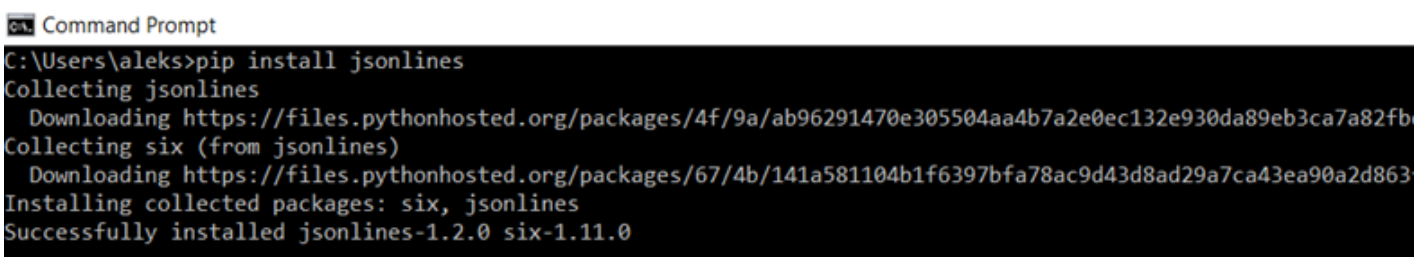
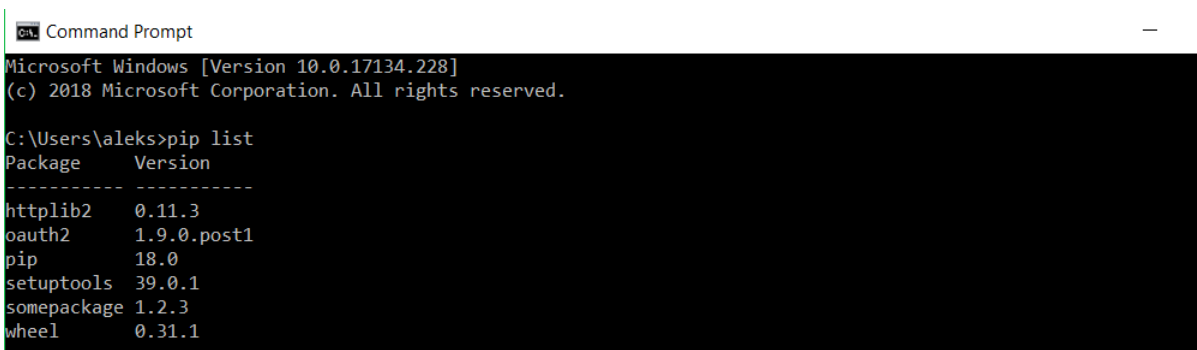
I installed Sublime. I tried to use Sublime, Jupyter Notebook and PyCharm, I think I am going to work with Sublime mostly and sometimes with Jupyter Notebook. Next picture shows installed and working Sublime.



I tried to install pip and it didn't really do anything, I assumed it was already included in Python 3.7, so I went to the next step where I tried installed oauth2 and it was already installed, as we can see on the next picture.



I wanted to make sure that everything was installed, so I ran command `pip list` (as you can see on the next picture). I realized I don't have two other things installed such as 'jsonlines' and request 'oauthlib'. I showed the installation of those below.



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Assignment 1, Twitter Stream

```
C:\Users\aleks>pip install requests-oauthlib
Collecting requests-oauthlib
  Downloading https://files.pythonhosted.org/packages/94/e7/c250d122992e1561690d9c0f7856dadb79d61fd4bdd0e598087dce607f6c/requests_oauthlib-0.6.2-py2.py3-none-any.whl (122kB)
    100% |#####| 122kB 2.2MB/s
Collecting requests-oauthlib==0.6.2 (from requests-oauthlib)
  Downloading https://files.pythonhosted.org/packages/e6/d1/ddd9cfea3e736399b97ded5c2dd62d1322adef4a72d816f1ed1049d6a179/oauthlib-2.1.0-py2.py3-none-any.whl (122kB)
    100% |#####| 122kB 2.2MB/s
Collecting requests==2.0.0 (from requests-oauthlib)
  Downloading https://files.pythonhosted.org/packages/65/47/7e02164a2a3db50ed6d8a6ab1d6d60b69c4c3fd57a284257925dfc12bda/requests-2.19.1-py2.py3-none-any.whl (122kB)
    100% |#####| 122kB 2.2MB/s
Collecting idna<2.8,>=2.5 (from requests==2.0.0->requests-oauthlib)
  Downloading https://files.pythonhosted.org/packages/4b/2a/0276479a4b3caeb8a8c1af2f8e4355746a97fab05a372e4a2c6a6b876165/idna-2.7-py2.py3-none-any.whl (61kB)
    100% |#####| 61kB 4.1MB/s
Collecting chardet<3.1.0,>=3.0.2 (from requests==2.0.0->requests-oauthlib)
  Downloading https://files.pythonhosted.org/packages/bc/a9/01ffebfb562e4274b6487b4bb1ddec7ca55ec7510b22e4c51f14098443b8/chardet-3.0.4-py2.py3-none-any.whl (143kB)
    100% |#####| 143kB 3.3MB/s
Collecting certifi>=2017.4.17 (from requests==2.0.0->requests-oauthlib)
  Downloading https://files.pythonhosted.org/packages/df/f7/04fee6ac349e915b82171f8e23cee63644d83663b34c539f7a09aed18f9e/certifi-2018.8.24-py2.py3-none-any.whl (153kB)
    100% |#####| 153kB 6.6MB/s
Collecting urllib3<1.24,>=1.21.1 (from requests==2.0.0->requests-oauthlib)
  Downloading https://files.pythonhosted.org/packages/bd/c9/6fdd990019071a4a32a5e7cb78a1d92c53851ef4f56f62a3486e6a7d8ffb/urllib3-1.23.0-py2.py3-none-any.whl (143kB)
    100% |#####| 143kB 3.3MB/s
Installing collected packages: oauthlib, idna, chardet, certifi, urllib3, requests, requests-oauthlib
Successfully installed certifi-2018.8.24 chardet-3.0.4 idna-2.7 oauthlib-2.1.0 requests-2.19.1 requests-oauthlib-1.0.0 urllib3-1.23.0

C:\Users\aleks>pip list
Package            Version
-----
certifi            2018.8.24
chardet            3.0.4
httplib2           0.11.3
idna               2.7
jsonlines          1.2.0
oauth2             1.9.0.post1
oauthlib           2.1.0
pip               18.0
requests           2.19.1
requests-oauthlib  1.0.0
setuptools         39.0.1
six               1.11.0
somepackage       1.2.3
urllib3            1.23
wheel              0.31.1

C:\Users\aleks>python twitterstream.py > output.txt
```

Next part of the assignment was to create the twitter account and create an app, I showed the account information, application (I called it Pinterest and used the Pinterest website), its info, and my keys and token.

 Developer Use cases Products Docs More Dashboard Sentiment Analysis 

Apps / Pinterest [Create an app](#)

App details **Keys and tokens** Permissions

Keys and tokens
Keys, secret keys and access tokens management.
Consumer API keys
SSjp9stpnlgNM163CsGCSW3n (API key)
zOGIC4IDO4XLAWBHAdPSqoTjXMuVATHYMQgvGYF0ULVtdNvov (API secret key)
[Regenerate](#)
Access token & access token secret
137746726-wc88jACMbQzqx7JrktWzu07aAC8gkIrFy1vl8OZN (Access token)
Ah2BSjxAIBjvevZqb9CNMoogxiOm4rKRkFPZAUtKICGIU (Access token secret)
Read and write (Access level)
[Revoke](#) [Regenerate](#)

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Assignment 1, Twitter Stream

Developer

Use cases


Products

Docs

More

Dashboard


Sentiment Analysis



App details

Details and URLs

Edit

 **App icon**

App icon is default, click edit to upload.

App Name

Pinterest

Description

This website is a collection of pictures on different topics.

Website URL

<https://www.pinterest.com/>

Sign in with Twitter

Disabled

Callback URL


None

Terms of service URL

None

Privacy policy URL

None

 Developer

Use cases


Products

Docs

More

Dashboard

Sentiment Analysis

 Understanding apps

What is an app?

Why register an app?

Which products require an API key?

App details

The following app details will be visible to app users and are required to generate the API keys needed to authenticate Twitter developer products.

App name (required)

Maximum characters: 32

Application description (required)

Share a description of your app. This description will be visible to users so this is a good place to tell them what your app does.

Please be detailed.

Between 10 and 200 characters

Website URL (required)

<https://>

Allow this application to be used to sign in with Twitter

[Learn more](#)

☐ Enable Sign in with Twitter

Callback URLs

OAuth 1.0a applications should specify their oauth_callback URL on the request token

After that I copied the information from keys and token and pasted it in the code from the attachment in sublime. I showed it on the next picture.

Alla Topp

Assignment 1, Twitter Stream

```
C:\Users\aleks\Downloads\twitterstream.py - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help

twitterstream.py
1 import requests
2 from requests_oauthlib import OAuth1
3 import jsonlines
4
5 api_key = "SSjp9stpNglgNM163CsGCSW3n"
6 api_secret = "zOGiC4iD04XLAWBHAdPSqoTjtXMUVAThYMQgvGYF0ULVtdNvov"
7 access_token_key = "137746726-wc88jACMbQzqx7JrktWzu07aAC8gkirFy1vi8OZN"
8 access_token_secret = "Ah2BSjxAtBjvevZqb9CNMoogxIOm4rKRkfPZAUtKiCG1U"
9
10 url = 'https://api.twitter.com/1.1/account/verify_credentials.json'
11 auth = OAuth1(api_key, api_secret, access_token_key, access_token_secret)
12
13 r = requests.get(url, auth=auth)
14 print(r.status_code)
15
16 url = 'https://stream.twitter.com/1.1/statuses/sample.json'
17 r = requests.get(url, auth=auth, stream=True)
18 if r.encoding is None:
19     r.encoding = 'utf-8'
20
21 with jsonlines.open('output.json', mode='w') as writer:
22     try:
23         for line in r.iter_lines(decode_unicode=True):
24             if line:
25                 writer.write(line)
26     except KeyboardInterrupt:
```

When I ran the command `twitterstream.py > output.txt` in command prompt, the `output.txt` and `output.json` files were created. Which we could see below.

Command Prompt

```
Microsoft Windows [Version 10.0.17134.228]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\aleks> python twitterstream.py > output.txt
```

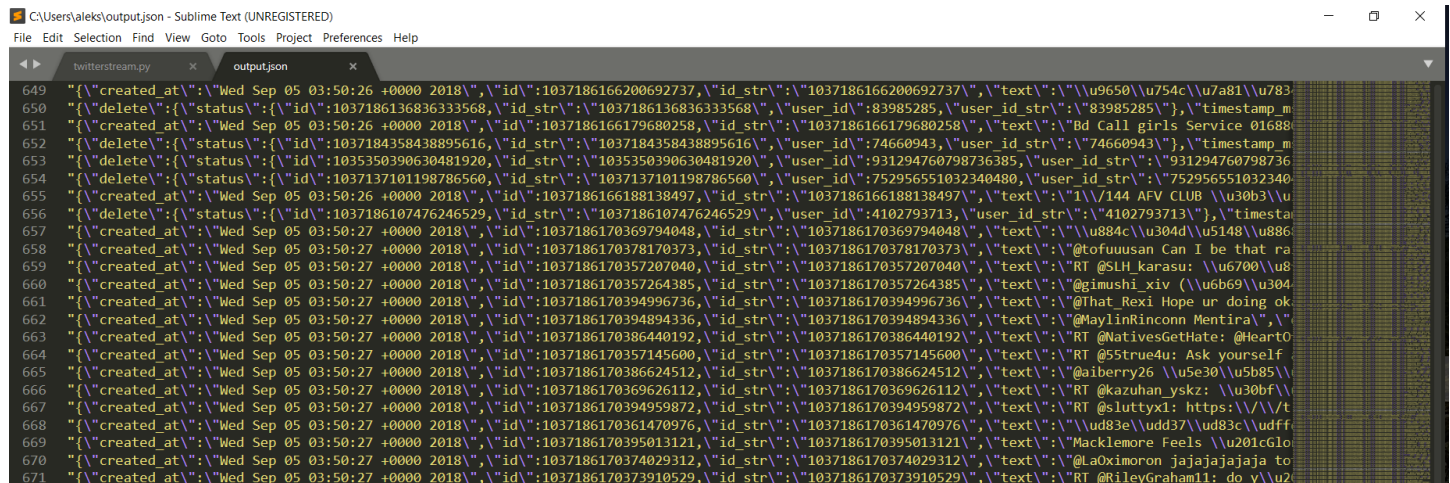
This PC > OS (C:) > Users > aleks

Name	Date modified	Type	Size
notebook	9/3/2018 5:06 PM	TeX Document	20 KB
output.json	9/4/2018 11:50 PM	JSON File	4,120 KB
output	9/4/2018 11:50 PM	Text Document	1 KB
output_0_0	8/5/2018 9:16 PM	PNG File	9 KB
output_0_1	8/26/2018 6:46 PM	PNG File	16 KB
output_0_2	8/26/2018 11:00 PM	PNG File	15 KB
output_1_0	8/12/2018 9:43 PM	PNG File	20 KB
output_1_1	8/19/2018 12:30 PM	PNG File	9 KB
output_2_0	8/12/2018 9:42 PM	PNG File	10 KB
output_2_1	9/3/2018 5:06 PM	PNG File	12 KB
output_3_1	9/3/2018 5:06 PM	PNG File	17 KB
output_4_1	8/26/2018 1:23 PM	PNG File	11 KB
output_4_2	8/12/2018 9:42 PM	PNG File	9 KB
P24, max odd number .ipynb	7/4/2018 11:32 PM	IPYNB File	3 KB
Page 6 Chapte 2.ipynb	7/4/2018 11:58 AM	IPYNB File	4 KB
Recursive binary search.ipynb	7/21/2018 4:40 PM	IPYNB File	3 KB
Recursive implementation of Fibonacci s...	7/11/2018 10:57 A	IPYNB File	2 KB
ROC.ipynb	8/26/2018 9:20 PM	IPYNB File	84 KB
springData	8/12/2018 12:03 PM	Text Document	1 KB
t-distribution.ipynb	8/16/2018 11:55 PM	IPYNB File	14 KB
twitterstream	9/4/2018 11:04 AM	Python File	1 KB
Untitled.ipynb	8/23/2018 5:15 PM	IPYNB File	2 KB

Alla Topp

Assignment 1, Twitter Stream

I opened the output.json file in Sublime and I could run it. The picture next shows the output.



```
C:\Users\aleks\output.json - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help

twitterstream.py x output.json x
649 {"created_at":"Wed Sep 05 03:50:26 +0000 2018","id":"1037186166200692737","id_str":"1037186166200692737","text":"\u9650\u754c\u7a81\u783
650 {"delete":{"status":{"id":"1037186136836333568","id_str":"1037186136836333568","user_id":"83985285","user_id_str":"83985285"},"timestamp_m
651 {"created_at":"Wed Sep 05 03:50:26 +0000 2018","id":"1037186166179680258","id_str":"1037186166179680258","text":"Bd Call girls Service 01688
652 {"delete":{"status":{"id":"1037184358438895616","id_str":"1037184358438895616","user_id":"74660943","user_id_str":"74660943"},"timestamp_m
653 {"delete":{"status":{"id":"1035350390630481920","id_str":"1035350390630481920","user_id":"931294760798736385","user_id_str":"931294760798736
654 {"delete":{"status":{"id":"1037137101198786560","id_str":"1037137101198786560","user_id":"752956551032340480","user_id_str":"752956551032340
655 {"created_at":"Wed Sep 05 03:50:26 +0000 2018","id":"1037186166188138497","id_str":"1037186166188138497","text":"I//144 AFV CLUB \u30b3\u
656 {"delete":{"status":{"id":"1037186107476246529","id_str":"1037186107476246529","user_id":"4102793713","user_id_str":"4102793713"},"timesta
657 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170369794048","id_str":"1037186170369794048","text":"\u884c\u304d\u5148\u886
658 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170378170373","id_str":"1037186170378170373","text":"@tofuusann Can I be that ra
659 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170357207040","id_str":"1037186170357207040","text":"RT @SLH karasu: \u6700\u8
660 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170357264385","id_str":"1037186170357264385","text":"@gimushi_xiv (\u6b69\u304
661 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170394996736","id_str":"1037186170394996736","text":"@That_Rexi Hope ur doing ok
662 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170394894336","id_str":"1037186170394894336","text":"@MaylinRinconn Mentira","
663 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170386440192","id_str":"1037186170386440192","text":"RT @NativesGetHate: @Heart0
664 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170357145600","id_str":"1037186170357145600","text":"RT @55true4u: Ask yourself
665 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170386624512","id_str":"1037186170386624512","text":"@aiberry26 \u5e30\u5b85\u
666 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170369626112","id_str":"1037186170369626112","text":"RT @kazuhan_yskz: \u30bf\u
667 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170394959872","id_str":"1037186170394959872","text":"RT @sluttyx1: https://t
668 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170361470976","id_str":"1037186170361470976","text":"\ud83e\udd37\ud83c\uddff
669 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170395013121","id_str":"1037186170395013121","text":"Macklemore Feels \u201cGlo
670 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170374029312","id_str":"1037186170374029312","text":"@LaOximoron jajajajajaja to
671 {"created_at":"Wed Sep 05 03:50:27 +0000 2018","id":"1037186170373910529","id_str":"1037186170373910529","text":"RT @RileyGraham11: do v\u201c
```