# 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.
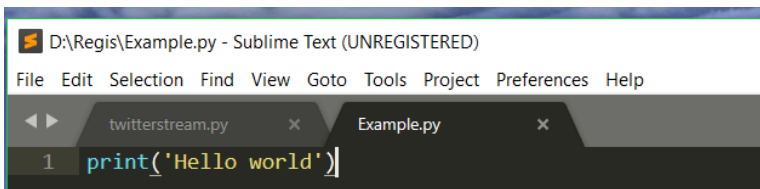


I tried to install pip and it didn`t really do anything, I assumed it was already included in Python 3.7, so I went to the next step where I tried installed oauth2 and it was already installed, as we can see on the next picture.
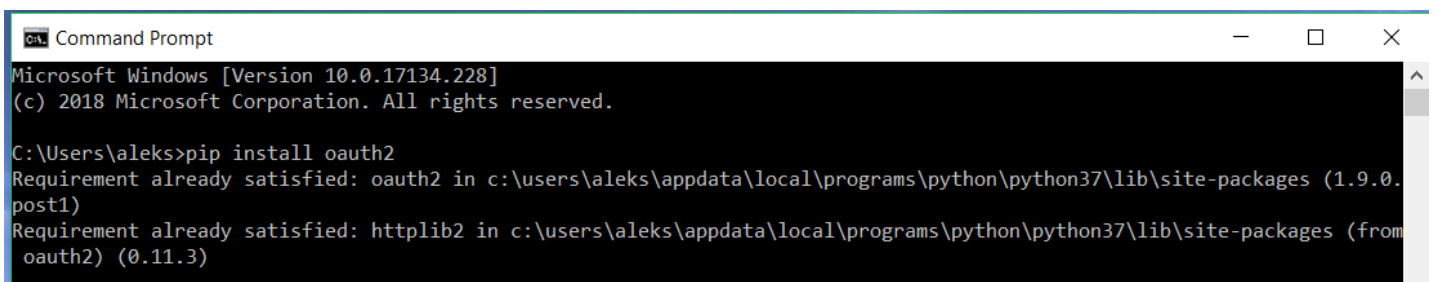


I wanted to make sure that everything was installed, so I ran command pip list (as you can see on the next picture). I realized I don`t have two other things installed such as 'jsonlines' and request 'oauthlib'. I showed the installation of those below.
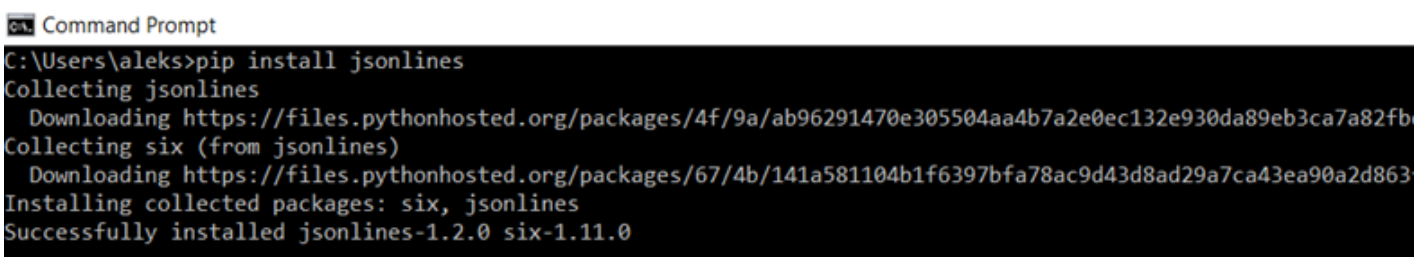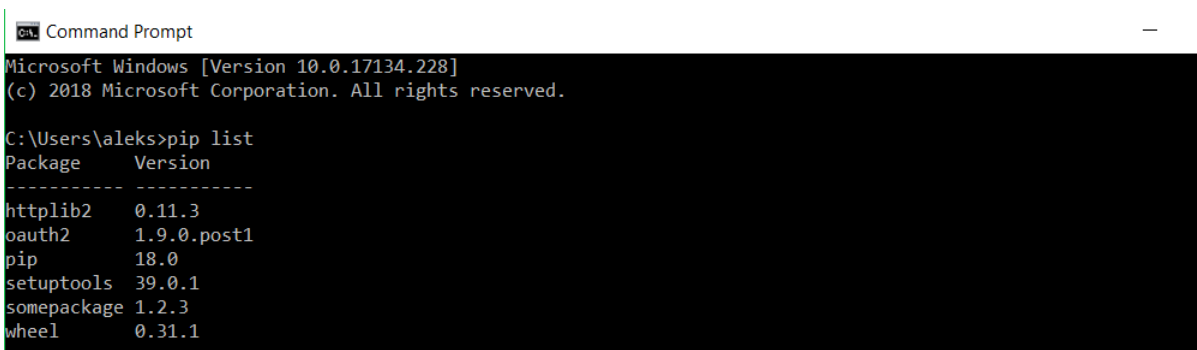
```
C:\Users\aleks>pip install requests-oauthlib
Collecting requests-oauthlib
  Downloading https://files.pythonhosted.org/packages/94/e7/c250d122992e1561690d9c0f7856dadb79d61fd4bdd0e598087dce607f6c/requests_oaut
Collecting oauthlib>=0.6.2 (from requests-oauthlib)
  Downloading https://files.pythonhosted.org/packages/e6/d1/ddd9cfea3e736399b97ded5c2dd62d1322adef4a72d816f1ed1049d6a179/oauthlib-2.1.
    100% |                                  | 122kB 2.2MB/s
Collecting requests>=2.0.0 (from requests-oauthlib)
  Downloading https://files.pythonhosted.org/packages/65/47/7e02164a2a3db50ed6d8a6ab1d6d60b69c4c3fdf57a284257925dfc12bda/requests-2.19
    100% |                                  | 92kB 6.1MB/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.
    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
    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.
    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-
    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

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.

After that I copies 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 = "zOGiC4iDO4XLAWBHAdPSqoTjtXMUVAThYMQgvGYF0ULVtdNvov"
7    access_token_key = "137746726-wc88jACMbQzqx7JrktWzu07aAC8gkirFy1vi8OZN"
8    access_token_secret = "Ah2BSjxAtBjvevZqb9CNMoogxIOm4rKRkfPZAUtKiCGlU"
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
```
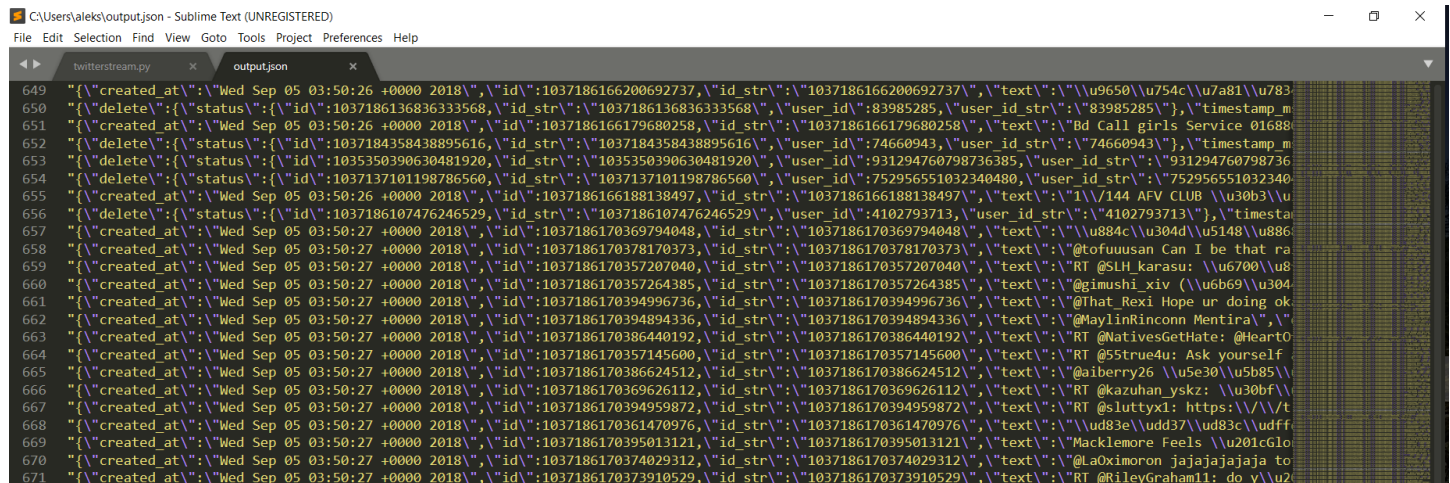
Alla Topp

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      output.json

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\":\"1\\/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\":\"@tofuuusan 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: @HeartO
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\\
666  "{\"created_at\":\"Wed Sep 05 03:50:27 +0000 2018\",\"id\":1037186170369626112,\"id_str\":\"1037186170369626112\",\"text\":\"RT @kazuhan_yskz: \\u30bf\\
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\\udff
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 y\\u2