```
Hansen@Hansens-MacBook-Pro:~ $ " clear
```

```
Hansen@Hansens-MacBook-Pro:~ $ " ls
Applications            Library             Public              experiments
Creative Cloud Files    MDIGB0_ideal.xbgf   PycharmProjects     nohup.out
Desktop                 Mathematica         amber_test          requirement.txt
Developer               Movies              anaconda3           seaborn-data
Documents               Music               android             solarized
Downloads               Parallels           bin                 texput.log
Dropbox                 Pictures            curl
Hansen@Hansens-MacBook-Pro:~ $ " cd Documents/
```

```
Hansen@Hansens-MacBook-Pro:~/Documents $ " ls
01_Spectrum_2018_INT.pdf
1-s2.0-S0378375897000414-main.pdf
14级前五学期学分绩公示表1.xlsx
2016-2017第二学期课程大纲
2017-18校历.pdf
2017Oct_Nature_Academic_Writing.pdf
2050906.pdf
A New Memory Contender.pdf
An Introduction to Programming with Mathematica.pdf
Analysis-of-Financial-Time-Series-Second-Edition.pdf
Analysis-of-Financial-Time-Series-Third-Edition-Wiley-Series-in-Probability-and-Statistics-.pdf
Bishop - Pattern Recognition And Machine Learning - Springer  2006.pdf
CV_Liyin He.pdf
Cypher_AFM_GUIDE.pdf
Desktop_Background_Image
DuLi_CV_Final.pdf
ESLII.pdf
Github_Desktop
HansenGrade.xlsx
Harvard_Advice_on_ResumeandCoverLetter.pdf
Icon?
KeyProcess.graffle
Kindle人资源索引.pdf
Klei
MATLAB
Mutnau_Signature
My EndNote Library.Data
My EndNote Library.enl
OneDrive
PE.log
QMFI-003洁净室使用规范培训报名表_王瀚宸.xls
README.md
ReadMe 2寸.jpg
ReadMe 6寸.jpg
ReadMe.jpg
Spss 使用索引.docx
TTKN
Test_for_CLatex
TextWrangler_5.0.2_User_Manual.pdf
Wolfram Mathematica
amber14
calculus.nb
editor.pdf
latex教程
numerical analysis.Timothy Sauer.图灵中文扫描版.pdf
scholar.py
~$1242081_1_王瀚宸.docx
~$C_Study_Plan.docx
~$HansenGrade.xlsx
~$rkReport for Week1 on Deep Learning on Mobile.docx
~$生殖健康教育.docx
一只没有皮卡丘的小智.pdf
乘坐西伯利亚铁路旅行是怎样的体验？ - 悟空的回答 - 知乎.pdf
假条.pages
先秦诸子2015.pdf
免修不免考申请.pages
初学者如何建立自己的网站指南.pdf
匡院历届学生去向.xlsx
南京大学交换生手册.pdf
南京大学出差审批表_hanchen.doc
南京大学本科生学生手册.pdf
南京大学校徽.png
各种曲谱
吴金瑞-拉丁汉文辞典.pdf
大学数学典型题解析（线性代数与数理统计分册）.pdf
就业嘉年华优秀毕业生讲稿_王瀚宸.docx
微电子工艺 课程大纲.pdf
```

瀚宸的个人总结.docx
用图表说话(say it with charts).pdf
编程小白的第一本 Python 入门书.pdf
羽队开支明细.xlsx
股票术语大全_互动百科.pdf
行业 丨 一文看懂"摩根系"发家史.pdf
香港人才引进计划.rtf
鸟哥的Linux私房菜 基础学习篇(第三版).pdf

```
Hansen@Hansens-MacBook-Pro:~/Documents $ " cd Github_Desktop/
Hansen@Hansens-MacBook-Pro:~/Documents/Github_Desktop $ " ls
Python_Learning    pointer-generator
Hansen@Hansens-MacBook-Pro:~/Documents/Github_Desktop $ " cd Python_Learning/
Hansen@Hansens-MacBook-Pro:~/Documents/Github_Desktop/Python_Learning $ " ls
Coursera Course            Online Materials and Notes WebCrawler_Python
Hansen_Notebook_Python     README.md
Hansen@Hansens-MacBook-Pro:~/Documents/Github_Desktop/Python_Learning $ " cd Online\ Materials\ and\
tes/
Hansen@Hansens-MacBook-Pro:~/Documents/Github_Desktop/Python_Learning/Online Materials and Notes $ "
NJU_Data Structure and Financial Algorithm
NJU_Introduction to Machine Learning
Oreilly_Natural Language Processing with Python.pdf
Oreilly_Python for Data Analysis
Stanford_CS224n_NLP with DeepLearning
Hansen@Hansens-MacBook-Pro:~/Documents/Github_Desktop/Python_Learning/Online Materials and Notes $ "
 Oreilly_
-bash: cd: Oreilly_: No such file or directory
Hansen@Hansens-MacBook-Pro:~/Documents/Github_Desktop/Python_Learning/Online Materials and Notes $ "
 Oreilly_Python\ for\ Data\ Analysis/
Hansen@Hansens-MacBook-Pro:~/Documents/Github_Desktop/Python_Learning/Online Materials and Notes/Orei
lly_Python for Data Analysis $ " l
-bash: l: command not found
Hansen@Hansens-MacBook-Pro:~/Documents/Github_Desktop/Python_Learning/Online Materials and Notes/Orei
lly_Python for Data Analysis $ " ls
My_Note                      ch04.ipynb                 ch09.ipynb
Python for Data Analysis.pdf ch05.ipynb                 ch10.ipynb
README.md                    ch06.ipynb                 ch11.ipynb
appendix_python.ipynb        ch07.ipynb                 ch12.ipynb
ch02.ipynb                   ch08.ipynb                 fec_study.ipynb
Hansen@Hansens-MacBook-Pro:~/Documents/Github_Desktop/Python_Learning/Online Materials and Notes/Orei
lly_Python for Data Analysis $ " ipython
Python 3.6.4 |Anaconda, Inc.| (default, Jan 16 2018, 12:04:33)
Type 'copyright', 'credits' or 'license' for more information
IPython 6.2.1 -- An enhanced Interactive Python. Type '?' for help.

In [1]: obj = """ {"name": "Wes", "places_lived": ["United States", "Spain", "Germany"], "pet": null,
   ...:  "siblings": [{"name": "Scott", "age": 25, "pet": "Zuko"}, {"name": "Katie", "age": 33, "pet"
   ...: : "Cisco"}] } """

In [2]: import json

In [3]: result = json.loads(obj)

In [4]: result
Out[4]:
{'name': 'Wes',
 'pet': None,
 'places_lived': ['United States', 'Spain', 'Germany'],
 'siblings': [{'age': 25, 'name': 'Scott', 'pet': 'Zuko'},
  {'age': 33, 'name': 'Katie', 'pet': 'Cisco'}]}

In [5]: from pandas import DataFrame

In [6]: siblings = DataFrame(result['siblings'], colums = ['name', 'age'])
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-6-28d2429c69dd> in <module>()
----> 1 siblings = DataFrame(result['siblings'], colums = ['name', 'age'])
```

```
TypeError: __init__() got an unexpected keyword argument 'colums'

In [7]: siblings = DataFrame(result['siblings'], columns = ['name', 'age'])

In [8]: siblings
Out[8]:
    name  age
0  Scott   25
1  Katie   33

In [9]: siblings = DataFrame(result['siblings'], columns = ['name', 'age', 'pet'])

In [10]: siblings
Out[10]:
    name  age    pet
0  Scott   25   Zuko
1  Katie   33  Cisco

In [11]: from lxml.html import parse

In [12]: parsed = parse(urlopen('https://finance.yahoo.com/quote/AAPL?p=AAPL'))
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-12-b5907962c6fe> in <module>()
----> 1 parsed = parse(urlopen('https://finance.yahoo.com/quote/AAPL?p=AAPL'))

NameError: name 'urlopen' is not defined

In [13]: from urllib2 import urlopen
---------------------------------------------------------------------------
ModuleNotFoundError                       Traceback (most recent call last)
<ipython-input-13-b89bebeb64cc> in <module>()
----> 1 from urllib2 import urlopen

ModuleNotFoundError: No module named 'urllib2'

In [14]: pip install urllib2

The following command must be run outside of the IPython shell:

    $ pip install urllib2

The Python package manager (pip) can only be used from outside of IPython.
Please reissue the `pip` command in a separate terminal or command prompt.

See the Python documentation for more informations on how to install packages:

    https://docs.python.org/3/installing/

In [15]: from urllib.request import urlopen

In [16]: parsed = parse(urlopen('https://finance.yahoo.com/quote/AAPL?p=AAPL'))

In [17]: parsed
Out[17]: <lxml.etree._ElementTree at 0x10fe9a308>

In [18]: doc = parsed.getroot()

In [19]: doc
Out[19]: <Element html at 0x10e7b88b8>

In [20]: links = doc.finall('.//a')
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
<ipython-input-20-0d434a7203db> in <module>()
----> 1 links = doc.finall('.//a')

AttributeError: 'HtmlElement' object has no attribute 'finall'
```

```
In [21]: links = doc.findall('.//a')

In [22]: links
Out[22]:
[<Element a at 0x10fa066d8>,
 <Element a at 0x10fa067c8>,
 <Element a at 0x10fa06778>,
 <Element a at 0x10fa06098>,
 <Element a at 0x10fa064a8>,
 <Element a at 0x10fa06048>,
 <Element a at 0x10fa060e8>,
 <Element a at 0x10fa06b88>,
 <Element a at 0x10fa06958>,
 <Element a at 0x10fa06278>,
 <Element a at 0x10fa06a98>,
 <Element a at 0x10fa06368>,
 <Element a at 0x10fa068b8>,
 <Element a at 0x10fa06728>,
 <Element a at 0x10fa06c78>,
 <Element a at 0x10fa06548>,
 <Element a at 0x10fa06598>,
 <Element a at 0x10fa065e8>,
 <Element a at 0x10fa06638>,
 <Element a at 0x10fa06cc8>,
 <Element a at 0x10fa06d18>,
 <Element a at 0x10fa06d68>,
 <Element a at 0x10fa06db8>,
 <Element a at 0x10fa06e08>,
 <Element a at 0x10fa06e58>,
 <Element a at 0x10fa06ea8>,
 <Element a at 0x10fa06ef8>,
 <Element a at 0x10fa06f48>,
 <Element a at 0x10fa06f98>,
 <Element a at 0x10fa0c048>,
 <Element a at 0x10fa0c098>,
 <Element a at 0x10fa0c0e8>,
 <Element a at 0x10fa0c138>,
 <Element a at 0x10fa0c188>,
 <Element a at 0x10fa0c1d8>,
 <Element a at 0x10fa0c228>,
 <Element a at 0x10fa0c278>,
 <Element a at 0x10fa0c2c8>,
 <Element a at 0x10fa0c318>,
 <Element a at 0x10fa0c368>,
 <Element a at 0x10fa0c3b8>,
 <Element a at 0x10fa0c408>,
 <Element a at 0x10fa0c458>,
 <Element a at 0x10fa0c4a8>,
 <Element a at 0x10fa0c4f8>,
 <Element a at 0x10fa0c548>,
 <Element a at 0x10fa0c598>,
 <Element a at 0x10fa0c5e8>,
 <Element a at 0x10fa0c638>,
 <Element a at 0x10fa0c688>,
 <Element a at 0x10fa0c6d8>,
 <Element a at 0x10fa0c728>]

In [23]: lnk = links[28]

In [24]: lnk
Out[24]: <Element a at 0x10fa06f98>

In [25]: lnk.get('hef')

In [26]: lnk.get('href')
Out[26]: '/news/apple-waving-fat-wad-cash-123500371.html'
```

```
In [27]: lnk.text_content()
Out[27]: 'Apple Is Waving a Fat Wad of Cash at Hollywood'

In [28]: urls = [lnk.get('href') for lnk in doc.findall('.//a')]

In [29]: urls[-10:]
Out[29]:
['/',
 '/watchlists',
 '/portfolios?bypass=true',
 '/screener',
 '/calendar',
 '/industries',
 '/personal-finance',
 '/tech',
 '/topic/yahoo-finance-podcast',
 '/live/facebook']

In [30]: tables = doc.findall('.//table')

In [31]: calls = tables[9]
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
<ipython-input-31-b0c9891d9968> in <module>()
----> 1 calls = tables[9]

IndexError: list index out of range

In [32]: calls = tables[1]

In [33]: talbles
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-33-f50bebf2675d> in <module>()
----> 1 talbles

NameError: name 'talbles' is not defined

In [34]: tables
Out[34]: [<Element table at 0x110325a48>, <Element table at 0x110327188>]

In [35]: from pandas.io.parsers import TextParser

In [36]: def parse_options_data(table):
    ...:         rows = table.findall('.//tr')
    ...:         header = _unpack(rows[0], knid = 'th')
    ...:         data = _unpack(r) for r in rows[1]
  File "<ipython-input-36-a3541b666d13>", line 4
    data = _unpack(r) for r in rows[1]
                      ^
SyntaxError: invalid syntax


In [37]: def parse_options_data(table):
    ...:         rows = table.findall('.//tr')
    ...:         header = _unpack(rows[0], knid = 'th')
    ...:         data = _unpack(r) for r in rows[1:]
  File "<ipython-input-37-a5548820fe3a>", line 4
    data = _unpack(r) for r in rows[1:]
                      ^
SyntaxError: invalid syntax


In [38]: def parse_options_data(table):
    ...:         rows = table.findall('.//tr')
    ...:         header = _unpack(rows[0], knid = 'th')
    ...:         data = [_unpack(r) for r in rows[1:]]
    ...:         return TextParser(data, names = header).get_chunk()
```

```
   ...:

In [39]: call_data = parse_options_data(calls)
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-39-c2b2724e7fd5> in <module>()
----> 1 call_data = parse_options_data(calls)

<ipython-input-38-e228fc87fd7c> in parse_options_data(table)
      1 def parse_options_data(table):
      2         rows = table.findall('.//tr')
----> 3         header = _unpack(rows[0], knid = 'th')
      4         data = [_unpack(r) for r in rows[1:]]
      5         return TextParser(data, names = header).get_chunk()

NameError: name '_unpack' is not defined

In [40]: def _unpack(row, kind = 'td'):
   ...:         elts = row.findall('.//%s' %kind)
   ...:         return [val.text_content() for val in elts]
   ...:

In [41]: call_data = parse_options_data(calls)
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-41-c2b2724e7fd5> in <module>()
----> 1 call_data = parse_options_data(calls)

<ipython-input-38-e228fc87fd7c> in parse_options_data(table)
      1 def parse_options_data(table):
      2         rows = table.findall('.//tr')
----> 3         header = _unpack(rows[0], knid = 'th')
      4         data = [_unpack(r) for r in rows[1:]]
      5         return TextParser(data, names = header).get_chunk()

TypeError: _unpack() got an unexpected keyword argument 'knid'

In [42]: def parse_options_data(table):
   ...:         rows = table.findall('.//tr')
   ...:         header = _unpack(rows[0], kind = 'th')
   ...:         data = [_unpack(r) for r in rows[1:]]
   ...:         return TextParser(data, names = header).get_chunk()
   ...:
   ...:

In [43]: call_data = parse_options_data(calls)

In [44]: put_data = parse_options_data(puts)
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-44-1e2eb1327bd1> in <module>()
----> 1 put_data = parse_options_data(puts)

NameError: name 'puts' is not defined

In [45]: puts = tables[1]

In [46]: put_data = parse_options_data(puts)

In [47]: call_data[:10]
Out[47]:
                          0              1
0                      Beta           1.10
1            PE Ratio (TTM)          17.36
2               EPS (TTM)           9.70
3            Earnings Date    May 1, 2018
4  Forward Dividend & Yield   2.52 (1.46%)
5          Ex-Dividend Date            NaN
```

```
6              1y Target Est        191.96

In [48]: puts = tables[0]

In [49]: put_data = parse_options_data(puts)

In [50]: call_data[:10]
Out[50]:
                        0              1
0                    Beta           1.10
1             PE Ratio (TTM)       17.36
2               EPS (TTM)           9.70
3             Earnings Date    May 1, 2018
4   Forward Dividend & Yield   2.52 (1.46%)
5           Ex-Dividend Date          NaN
6               1y Target Est        191.96

In [51]: import requests

In [52]: url = 'https://twitter.com/search?q=python%20pandas&src=typd'

In [53]: resp = requests.get(url)
^C---------------------------------------------------------------------
KeyboardInterrupt                         Traceback (most recent call last)
<ipython-input-53-b76dcb19bdd0> in <module>()
----> 1 resp = requests.get(url)

~/anaconda3/lib/python3.6/site-packages/requests/api.py in get(url, params, **kwargs)
     70
     71       kwargs.setdefault('allow_redirects', True)
---> 72       return request('get', url, params=params, **kwargs)
     73
     74


~/anaconda3/lib/python3.6/site-packages/requests/api.py in request(method, url, **kwargs)
     56       # cases, and look like a memory leak in others.
     57       with sessions.Session() as session:
---> 58           return session.request(method=method, url=url, **kwargs)
     59
     60


~/anaconda3/lib/python3.6/site-packages/requests/sessions.py in request(self, method, url, params, data, headers, cookies, files, auth, timeout, allow_redirects, proxies, hooks, stream, verify, cert, json)
    506           }
    507           send_kwargs.update(settings)
--> 508           resp = self.send(prep, **send_kwargs)
    509
    510           return resp

~/anaconda3/lib/python3.6/site-packages/requests/sessions.py in send(self, request, **kwargs)
    616
    617           # Send the request
--> 618           r = adapter.send(request, **kwargs)
    619
    620           # Total elapsed time of the request (approximately)

~/anaconda3/lib/python3.6/site-packages/requests/adapters.py in send(self, request, stream, timeout, verify, cert, proxies)
    438                   decode_content=False,
    439                   retries=self.max_retries,
--> 440                   timeout=timeout
    441               )
    442

~/anaconda3/lib/python3.6/site-packages/urllib3/connectionpool.py in urlopen(self, method, url, body, headers, retries, redirect, assert_same_host, timeout, pool_timeout, release_conn, chunked, body_pos, **response_kw)
```

```
    599                                                              timeout=timeout_obj,
    600                                                              body=body, headers=headers,
--> 601                                                              chunked=chunked)
    602
    603                 # If we're going to release the connection in ``finally:``, then

~/anaconda3/lib/python3.6/site-packages/urllib3/connectionpool.py in _make_request(self, conn, method
, url, timeout, chunked, **httplib_request_kw)
    344             # Trigger any extra validation we need to do.
    345             try:
--> 346                 self._validate_conn(conn)
    347             except (SocketTimeout, BaseSSLError) as e:
    348                 # Py2 raises this as a BaseSSLError, Py3 raises it as socket timeout.

~/anaconda3/lib/python3.6/site-packages/urllib3/connectionpool.py in _validate_conn(self, conn)
    848             # Force connect early to allow us to validate the connection.
    849             if not getattr(conn, 'sock', None):  # AppEngine might not have  `.sock`
--> 850                 conn.connect()
    851
    852             if not conn.is_verified:

~/anaconda3/lib/python3.6/site-packages/urllib3/connection.py in connect(self)
    282     def connect(self):
    283         # Add certificate verification
--> 284         conn = self._new_conn()
    285
    286         hostname = self.host

~/anaconda3/lib/python3.6/site-packages/urllib3/connection.py in _new_conn(self)
    139         try:
    140             conn = connection.create_connection(
--> 141                 (self.host, self.port), self.timeout, **extra_kw)
    142
    143         except SocketTimeout as e:

~/anaconda3/lib/python3.6/site-packages/urllib3/util/connection.py in create_connection(address, time
out, source_address, socket_options)
    71             if source_address:
    72                 sock.bind(source_address)
---> 73             sock.connect(sa)
    74             return sock
    75

KeyboardInterrupt:

In [54]: url = 'https://twitter.com/search?q=python%20pandas'

In [55]: resp = requests.get(url)
---------------------------------------------------------------------------
TimeoutError                              Traceback (most recent call last)
~/anaconda3/lib/python3.6/site-packages/urllib3/connection.py in _new_conn(self)
    140             conn = connection.create_connection(
--> 141                 (self.host, self.port), self.timeout, **extra_kw)
    142

~/anaconda3/lib/python3.6/site-packages/urllib3/util/connection.py in create_connection(address, time
out, source_address, socket_options)
    82         if err is not None:
---> 83             raise err
    84

~/anaconda3/lib/python3.6/site-packages/urllib3/util/connection.py in create_connection(address, time
out, source_address, socket_options)
    72                 sock.bind(source_address)
---> 73             sock.connect(sa)
    74             return sock

TimeoutError: [Errno 60] Operation timed out
```

During handling of the above exception, another exception occurred:

```
NewConnectionError                        Traceback (most recent call last)
~/anaconda3/lib/python3.6/site-packages/urllib3/connectionpool.py in urlopen(self, method, url, body,
 headers, retries, redirect, assert_same_host, timeout, pool_timeout, release_conn, chunked, body_pos
, **response_kw)
    600                                                         body=body, headers=headers,
--> 601                                                         chunked=chunked)
    602

~/anaconda3/lib/python3.6/site-packages/urllib3/connectionpool.py in _make_request(self, conn, method
, url, timeout, chunked, **httplib_request_kw)
    345             try:
--> 346                 self._validate_conn(conn)
    347             except (SocketTimeout, BaseSSLError) as e:

~/anaconda3/lib/python3.6/site-packages/urllib3/connectionpool.py in _validate_conn(self, conn)
    849         if not getattr(conn, 'sock', None):  # AppEngine might not have  `.sock`
--> 850             conn.connect()
    851

~/anaconda3/lib/python3.6/site-packages/urllib3/connection.py in connect(self)
    283         # Add certificate verification
--> 284         conn = self._new_conn()
    285

~/anaconda3/lib/python3.6/site-packages/urllib3/connection.py in _new_conn(self)
    149             raise NewConnectionError(
--> 150                 self, "Failed to establish a new connection: %s" % e)
    151

NewConnectionError: <urllib3.connection.VerifiedHTTPSConnection object at 0x113942828>: Failed to est
ablish a new connection: [Errno 60] Operation timed out

During handling of the above exception, another exception occurred:

MaxRetryError                             Traceback (most recent call last)
~/anaconda3/lib/python3.6/site-packages/requests/adapters.py in send(self, request, stream, timeout,
verify, cert, proxies)
    439                     retries=self.max_retries,
--> 440                     timeout=timeout
    441                 )

~/anaconda3/lib/python3.6/site-packages/urllib3/connectionpool.py in urlopen(self, method, url, body,
 headers, retries, redirect, assert_same_host, timeout, pool_timeout, release_conn, chunked, body_pos
, **response_kw)
    638             retries = retries.increment(method, url, error=e, _pool=self,
--> 639                                         _stacktrace=sys.exc_info()[2])
    640             retries.sleep()

~/anaconda3/lib/python3.6/site-packages/urllib3/util/retry.py in increment(self, method, url, respons
e, error, _pool, _stacktrace)
    387         if new_retry.is_exhausted():
--> 388             raise MaxRetryError(_pool, url, error or ResponseError(cause))
    389

MaxRetryError: HTTPSConnectionPool(host='twitter.com', port=443): Max retries exceeded with url: /sea
rch?q=python%20pandas (Caused by NewConnectionError('<urllib3.connection.VerifiedHTTPSConnection obje
ct at 0x113942828>: Failed to establish a new connection: [Errno 60] Operation timed out',))

During handling of the above exception, another exception occurred:

ConnectionError                           Traceback (most recent call last)
<ipython-input-55-b76dcb19bdd0> in <module>()
----> 1 resp = requests.get(url)

~/anaconda3/lib/python3.6/site-packages/requests/api.py in get(url, params, **kwargs)
```

```
    70
    71          kwargs.setdefault('allow_redirects', True)
---> 72          return request('get', url, params=params, **kwargs)
    73
    74


~/anaconda3/lib/python3.6/site-packages/requests/api.py in request(method, url, **kwargs)
    56          # cases, and look like a memory leak in others.
    57          with sessions.Session() as session:
---> 58              return session.request(method=method, url=url, **kwargs)
    59
    60


~/anaconda3/lib/python3.6/site-packages/requests/sessions.py in request(self, method, url, params, data, headers, cookies, files, auth, timeout, allow_redirects, proxies, hooks, stream, verify, cert, json)
    506              }
    507              send_kwargs.update(settings)
--> 508              resp = self.send(prep, **send_kwargs)
    509
    510              return resp


~/anaconda3/lib/python3.6/site-packages/requests/sessions.py in send(self, request, **kwargs)
    616
    617          # Send the request
--> 618          r = adapter.send(request, **kwargs)
    619
    620          # Total elapsed time of the request (approximately)


~/anaconda3/lib/python3.6/site-packages/requests/adapters.py in send(self, request, stream, timeout, verify, cert, proxies)
    506                  raise SSLError(e, request=request)
    507
--> 508                  raise ConnectionError(e, request=request)
    509
    510          except ClosedPoolError as e:


ConnectionError: HTTPSConnectionPool(host='twitter.com', port=443): Max retries exceeded with url: /search?q=python%20pandas (Caused by NewConnectionError('<urllib3.connection.VerifiedHTTPSConnection object at 0x113942828>: Failed to establish a new connection: [Errno 60] Operation timed out',))

In [56]: import sqlite3

In [57]: query = """ CREATE TABLE test (a VARCHAR(20), b VARCHAR(20), c REAL, d INTEGER );"""

In [58]: con = sqlite3.connect(':memory:')

In [59]: con.execute(query)
Out[59]: <sqlite3.Cursor at 0x1138dbea0>

In [60]: con.commir()
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
<ipython-input-60-8e2d0d7fce3b> in <module>()
----> 1 con.commir()

AttributeError: 'sqlite3.Connection' object has no attribute 'commir'

In [61]: con.commit()

In [62]: data = [('Atlanta', 'Georgia', 1.25, 6), ('Tallahassee', 'Florida', 2.6, 3), ('Sacramento',
    ...: 'California', 1.7, 5)] stmt = "INSERT INTO test VALUES(?, ?, ?, ?)"
  File "<ipython-input-62-3fbf11ac0585>", line 1
    data = [('Atlanta', 'Georgia', 1.25, 6), ('Tallahassee', 'Florida', 2.6, 3), ('Sacramento', 'California', 1.7, 5)] stmt = "INSERT INTO test VALUES(?, ?, ?, ?)"
                   ^
SyntaxError: invalid syntax
```

```
In [63]: data = [('Atlanta', 'Georgia', 1.25, 6), ('Tallahassee', 'Florida', 2.6, 3), ('Sacramento',
    ...: 'California', 1.7, 5)]

In [64]: stmt = 'INSERT INTO test VALUES(?,?,?,?)'

In [65]: con.executemany(stmt, data)
Out[65]: <sqlite3.Cursor at 0x113954ce0>

In [66]: con.commit()

In [67]: cursor = con.execute('select * from test')

In [68]: rows = cursor.fetchall

In [69]: rows = cursor.fetchall()

In [70]: rows
Out[70]:
[('Atlanta', 'Georgia', 1.25, 6),
 ('Tallahassee', 'Florida', 2.6, 3),
 ('Sacramento', 'California', 1.7, 5)]

In [71]: cursor.description()
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-71-8c9c15cf3b92> in <module>()
----> 1 cursor.description()

TypeError: 'tuple' object is not callable

In [72]: cursor.description
Out[72]:
(('a', None, None, None, None, None, None),
 ('b', None, None, None, None, None, None),
 ('c', None, None, None, None, None, None),
 ('d', None, None, None, None, None, None))

In [73]: DataFrame(rows, columns = zip(*cursor.description)[0])
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-73-43c23e82b876> in <module>()
----> 1 DataFrame(rows, columns = zip(*cursor.description)[0])

TypeError: 'zip' object is not subscriptable

In [74]: zip
Out[74]: zip

In [75]: zip?
Init signature: zip(self, /, *args, **kwargs)
Docstring:
zip(iter1 [,iter2 [...]]) --> zip object

Return a zip object whose .__next__() method returns a tuple where
the i-th element comes from the i-th iterable argument.  The .__next__()
method continues until the shortest iterable in the argument sequence
is exhausted and then it raises StopIteration.
Type:           type

In [76]: DataFrame(rows, columns=zip(*cursor.description)[0])
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-76-89069a78d9b0> in <module>()
----> 1 DataFrame(rows, columns=zip(*cursor.description)[0])

TypeError: 'zip' object is not subscriptable
```

```
In [77]: DataFrame(rows, columns=list(zip(*cursor.description))[0])
Out[77]:
            a           b     c  d
0      Atlanta     Georgia  1.25  6
1   Tallahassee    Florida  2.60  3
2   Sacramento  California  1.70  5

In [78]: import pandas.io.sql as sql

In [79]: sql.read_frame('select * from test', con)
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
<ipython-input-79-cbcea676feea> in <module>()
----> 1 sql.read_frame('select * from test', con)

AttributeError: module 'pandas.io.sql' has no attribute 'read_frame'

In [80]: sql.read_sql('select * from test', con)
Out[80]:
            a           b     c  d
0      Atlanta     Georgia  1.25  6
1   Tallahassee    Florida  2.60  3
2   Sacramento  California  1.70  5

In [81]: import pymongo
---------------------------------------------------------------------------
ModuleNotFoundError                       Traceback (most recent call last)
<ipython-input-81-c275cfc49946> in <module>()
----> 1 import pymongo

ModuleNotFoundError: No module named 'pymongo'

In [82]: import pymongo

In [83]: con = pymongo.Connection('localhost', port=27017)
---------------------------------------------------------------------------
AttributeError                            Traceback (most recent call last)
<ipython-input-83-ddea49f83729> in <module>()
----> 1 con = pymongo.Connection('localhost', port=27017)

AttributeError: module 'pymongo' has no attribute 'Connection'

In [84]: con = pymongo.MongoClient('localhost', port=27017)

In [85]: con
Out[85]: MongoClient(host=['localhost:27017'], document_class=dict, tz_aware=False, connect=True)

In [86]: tweets = con.db.tweets

In [87]: tweets
Out[87]: Collection(Database(MongoClient(host=['localhost:27017'], document_class=dict, tz_aware=Fals
e, connect=True), 'db'), 'tweets')

In [88]: import reqeusts, json
---------------------------------------------------------------------------
ModuleNotFoundError                       Traceback (most recent call last)
<ipython-input-88-7e9c9ae2d8b3> in <module>()
----> 1 import reqeusts, json

ModuleNotFoundError: No module named 'reqeusts'

In [89]: import requests, json

In [90]:
```