In [2]:
```
pip install tushare
```

```
Collecting tushare
  Downloading tushare-1.2.67-py3-none-any.whl (129 kB)
     |████████████████████████████████| 129 kB 6.5 MB/s eta 0:00:01
Collecting lxml
  Downloading lxml-4.6.3.tar.gz (3.2 MB)
     |████████████████████████████████| 3.2 MB 5.6 MB/s eta 0:00:01
Requirement already satisfied: requests in /opt/homebrew/Cellar/jupyt
erlab/3.1.9/libexec/lib/python3.9/site-packages (from tushare) (2.26.
0)
Collecting bs4
  Downloading bs4-0.0.1.tar.gz (1.1 kB)
Collecting pandas
  Downloading pandas-1.3.4.tar.gz (4.7 MB)
     |████████████████████████████████| 4.7 MB 7.1 MB/s eta 0:00:01
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
    Preparing wheel metadata ... done
Requirement already satisfied: websocket-client>=0.57.0 in /opt/homeb
rew/Cellar/jupyterlab/3.1.9/libexec/lib/python3.9/site-packages (from
tushare) (1.2.1)
Collecting simplejson
  Downloading simplejson-3.17.5-cp39-cp39-macosx_11_0_arm64.whl (73 k
B)
     |████████████████████████████████| 73 kB 5.0 MB/s eta 0:00:01
Collecting beautifulsoup4
  Downloading beautifulsoup4-4.10.0-py3-none-any.whl (97 kB)
     |████████████████████████████████| 97 kB 12.4 MB/s eta 0:00:01
Collecting soupsieve>1.2
  Downloading soupsieve-2.2.1-py3-none-any.whl (33 kB)
Requirement already satisfied: python-dateutil>=2.7.3 in /opt/homebre
w/Cellar/jupyterlab/3.1.9/libexec/lib/python3.9/site-packages (from p
andas->tushare) (2.8.2)
Requirement already satisfied: pytz>=2017.3 in /opt/homebrew/Cellar/j
upyterlab/3.1.9/libexec/lib/python3.9/site-packages (from pandas->tus
hare) (2021.1)
Requirement already satisfied: numpy>=1.20.0 in /opt/homebrew/lib/pyt
hon3.9/site-packages (from pandas->tushare) (1.21.2)
Requirement already satisfied: six>=1.5 in /opt/homebrew/Cellar/jupyt
erlab/3.1.9/libexec/lib/python3.9/site-packages (from python-dateutil
>=2.7.3->pandas->tushare) (1.16.0)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in /opt/homebrew
/Cellar/jupyterlab/3.1.9/libexec/lib/python3.9/site-packages (from re
quests->tushare) (1.26.6)
Requirement already satisfied: certifi>=2017.4.17 in /opt/homebrew/Ce
llar/jupyterlab/3.1.9/libexec/lib/python3.9/site-packages (from reque
sts->tushare) (2021.5.30)
```

```
Requirement already satisfied: charset_normalizer~=2.0.0 in /opt/home
brew/Cellar/jupyterlab/3.1.9/libexec/lib/python3.9/site-packages (fro
m requests->tushare) (2.0.4)
Requirement already satisfied: idna<4,>=2.5 in /opt/homebrew/Cellar/j
upyterlab/3.1.9/libexec/lib/python3.9/site-packages (from requests->t
ushare) (3.2)
Building wheels for collected packages: bs4, lxml, pandas
  Building wheel for bs4 (setup.py) ... done
  Created wheel for bs4: filename=bs4-0.0.1-py3-none-any.whl size=127
1 sha256=dc959b93369c234eef508af469807deddabc878a8b20190bf21ab15f8a66
d48d
  Stored in directory: /Users/andy/Library/Caches/pip/wheels/73/2b/cb
/099980278a0c9a3e57ff1a89875ec07bfa0b6fcbebb9a8cad3
  Building wheel for lxml (setup.py) ... done
  Created wheel for lxml: filename=lxml-4.6.3-cp39-cp39-macosx_11_0_a
rm64.whl size=1491834 sha256=07cc3b3bfe2050a6fcbd2cd13151de02a9e5aeee
6eb87dde446972ea15e50a47
  Stored in directory: /Users/andy/Library/Caches/pip/wheels/6c/21/10
/6efb7c8c644d8aecc1a85554f10af608c3c70a48f4836c375e
  Building wheel for pandas (PEP 517) ... done
  Created wheel for pandas: filename=pandas-1.3.4-cp39-cp39-macosx_11
_0_arm64.whl size=10278410 sha256=d6dcb301b7bd5c451994243c89649eae6c1
b2233d06644d41fc3b8a288d2b6b4
  Stored in directory: /Users/andy/Library/Caches/pip/wheels/44/1a/bb
/e1d1c2bc72adfa0c96d573d26755d412caa9a1a60b6898983c
Successfully built bs4 lxml pandas
Installing collected packages: soupsieve, beautifulsoup4, simplejson,
pandas, lxml, bs4, tushare
Successfully installed beautifulsoup4-4.10.0 bs4-0.0.1 lxml-4.6.3 pan
das-1.3.4 simplejson-3.17.5 soupsieve-2.2.1 tushare-1.2.67
WARNING: You are using pip version 21.1.3; however, version 21.3 is a
vailable.
You should consider upgrading via the '/opt/homebrew/Cellar/jupyterla
b/3.1.9/libexec/bin/python3.9 -m pip install --upgrade pip' command.
Note: you may need to restart the kernel to use updated packages.
```

In [5]: `pip install tqdm`

```
Collecting tqdm
  Downloading tqdm-4.62.3-py2.py3-none-any.whl (76 kB)
     |████████████████████████████████| 76 kB 3.7 MB/s eta 0:00:01
Installing collected packages: tqdm
Successfully installed tqdm-4.62.3
WARNING: You are using pip version 21.1.3; however, version 21.3 is a
vailable.
You should consider upgrading via the '/opt/homebrew/Cellar/jupyterla
b/3.1.9/libexec/bin/python3.9 -m pip install --upgrade pip' command.
Note: you may need to restart the kernel to use updated packages.
```

In [6]:
```python
# Import libraries
import pandas as pd
import tushare as ts
from datetime import date
from tqdm import tqdm
```

In [12]:
```python
def download_ticker_mapping(tushare_token, ticker_path=None):
    ts.set_token(tushare_token)
    pro=ts.pro_api()
    df_ticker=pro.stock_basic(exchange="",list_status="L",fields="")

    if ticker_path is not None:
        df_ticker.to_excel(ticker_path,index=False,encoding="utf_8_sig

    return df_ticker
#download_ticker_mapping("600848", ticker_path=None)
```

In [14]:
```python
all_data=ts.get_hist_data('000002')
all_data
```

本接口即将停止更新，请尽快使用Pro版接口：https://waditu.com/document/2

Out[14]:

date	open	high	close	low	volume	price_change	p_change	ma5	ma10	ma20
2021-10-21	20.20	20.93	20.73	19.92	1623941.50	0.73	3.65	20.484	21.166	20.683
2021-10-20	20.36	20.57	20.00	19.91	914268.94	-0.30	-1.48	20.598	21.224	20.653
2021-10-19	20.52	20.74	20.30	20.21	637327.38	0.00	0.00	21.058	21.341	20.716
2021-10-18	21.03	21.08	20.30	20.18	1076032.25	-0.79	-3.75	21.458	21.419	20.721
2021-10-15	21.25	21.47	21.09	20.95	784296.88	-0.21	-0.99	21.818	21.370	20.716
...	...	...	...	...	...	...	...	...	...	...
2019-04-29	29.01	29.56	29.35	29.00	498386.09	0.27	0.93	29.386	29.386	29.386
2019-04-26	29.10	29.38	29.08	28.90	396883.03	-0.31	-1.05	29.395	29.395	29.395
2019-04-25	29.41	29.86	29.39	29.20	472220.91	-0.21	-0.71	29.500	29.500	29.500
2019-04-24	29.80	29.81	29.60	29.01	447456.69	0.09	0.30	29.555	29.555	29.555
2019-04-23	29.40	29.75	29.51	29.25	599063.81	0.00	0.00	29.510	29.510	29.510

607 rows × 14 columns

The data shown here is the up-to-date historical data of mainland china stock market, where i just need to input the token/stock number of the specific stock, then I can have the datatable for the entire stock from 2019 to 2021, which inclused the open, high, close, low, and etc information.

The data come from tushare which is a chinese company, they first post their open-source github code online, and created a package called tushare to track stock information, it will update everyday. website in chinese: [https://waditu.com/document/2 (https://waditu.com/document/2)](https://waditu.com/document/2) github repository: [https://github.com/waditu/Tushare (https://github.com/waditu/Tushare)](https://github.com/waditu/Tushare)

It is a tool that realizes the process of data collection, cleaning and processing to data storage of financial data such as stocks/futures, and meets the needs of financial quantitative analysts and people studying data analysis in terms of data acquisition. It is characterized by a wide range of data coverage and it is simple to use the packages and datatable.

The biasness maybe the data does not cover the holistics to a stock, some stocks are very old but the datatable only covers the all the information from 2019/4/23. I have not yet come up with any censoring related to the datatable, however, it is a chinese company that will come under chinese policy's rule.

In [ ]: