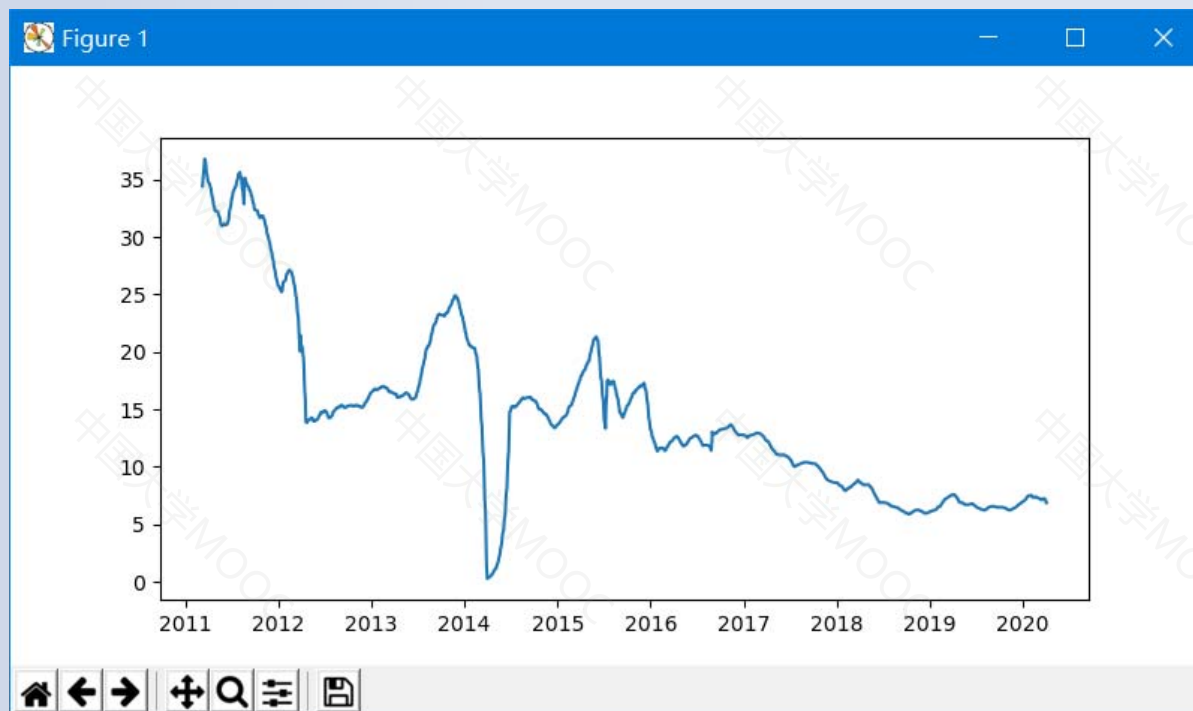


# Python大数据分析

## 案例2：让股票趋势画出来

# matplotlib



Settings

Q

Appearance & Behavior

Keymap

Editor

Plugins

Version Control

Project: mp2

Project Interpreter

Project Structure

Build, Execution, Deployment

Languages & Frameworks

Tools

Project: mp2 > Project Interpreter

For current project

Project Interpreter: Python 3.7 (mp2) C:\Users\leeshuqing\PycharmProjects\mp2\venv\Scripts\python.exe

Reset

Package	Version	Latest version
cycler	0.10.0	0.10.0
kiwisolver	1.1.0	1.2.0
matplotlib	3.1.3	3.2.1
numpy	1.18.1	1.18.
pandas	1.0.1	1.0.3
pip	19.0.3	20.0.
pyparsing	2.4.6	2.4.7
python-dateutil	2.8.1	2.8.1
pytz	2019.3	2019.3
scipy	1.4.1	1.4.1
setuptools	40.8.0	46.1.
six	1.14.0	1.14.0

Available Packages

Q matplotlib

django-matplotlib

eddington-matplotlib

fc-matplotlib4mesh

fc-simesh-matplotlib

hangar-matplotlib

imatplotlib

ing-theme-matplotlib

japanize-matplotlib

jirafs-matplotlib

matplotlib

matplotlib-colorbar

matplotlib-helpers

matplotlib-hep

matplotlib-label-lines

matplotlib-pgfutils

matplotlib-scalebar

matplotlib-stream

matplotlib-subsets

matplotlib-venn

matplotlib-venn-wordcloud

matplotlib2tikz

matplotlib\_ism2

matplotlibiaux

matplotlibhelper

timeseriesql-matplotlib

Description

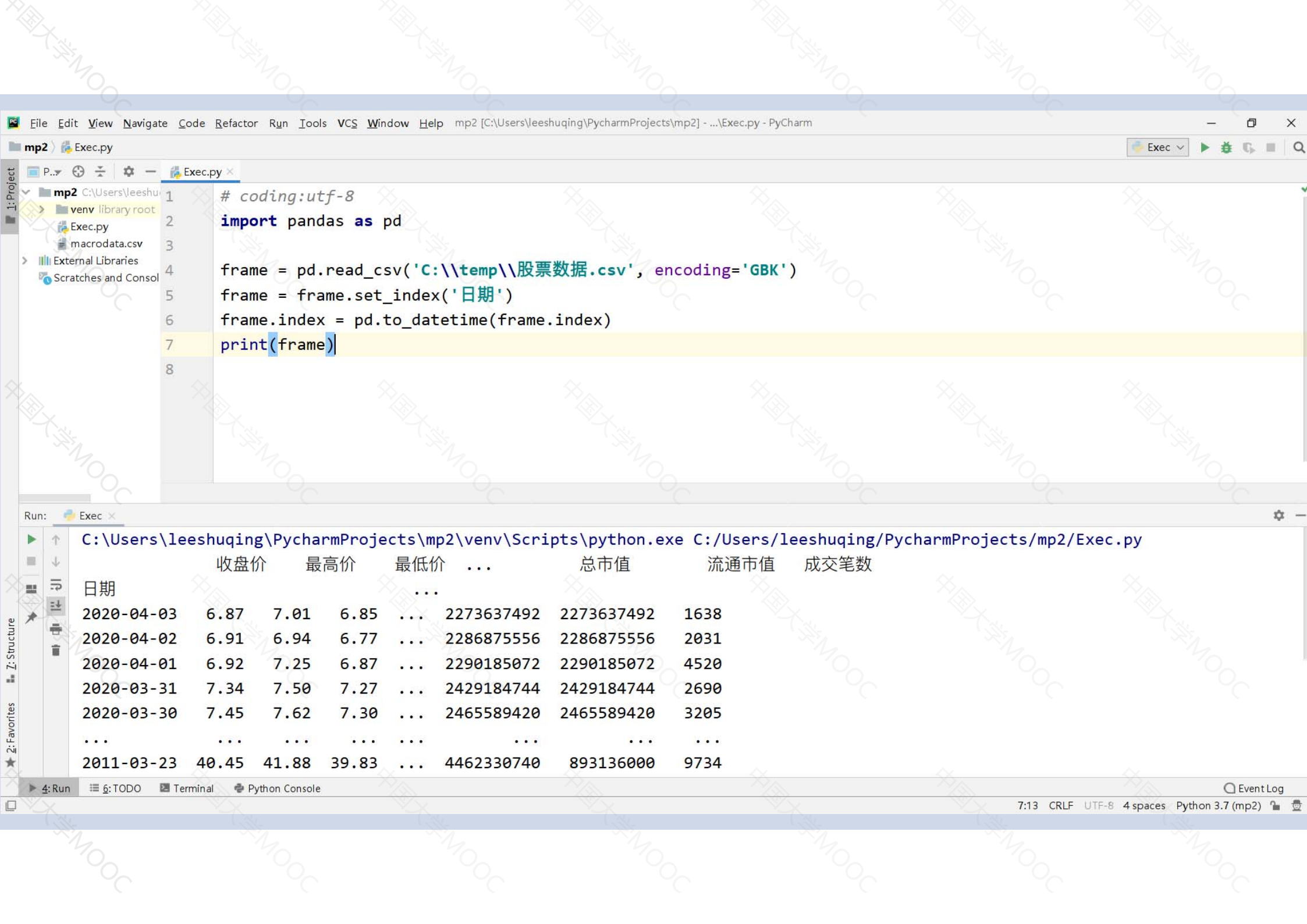
Loading...

☐ Specify version

☐ Options

Install Package

Manage Repositories



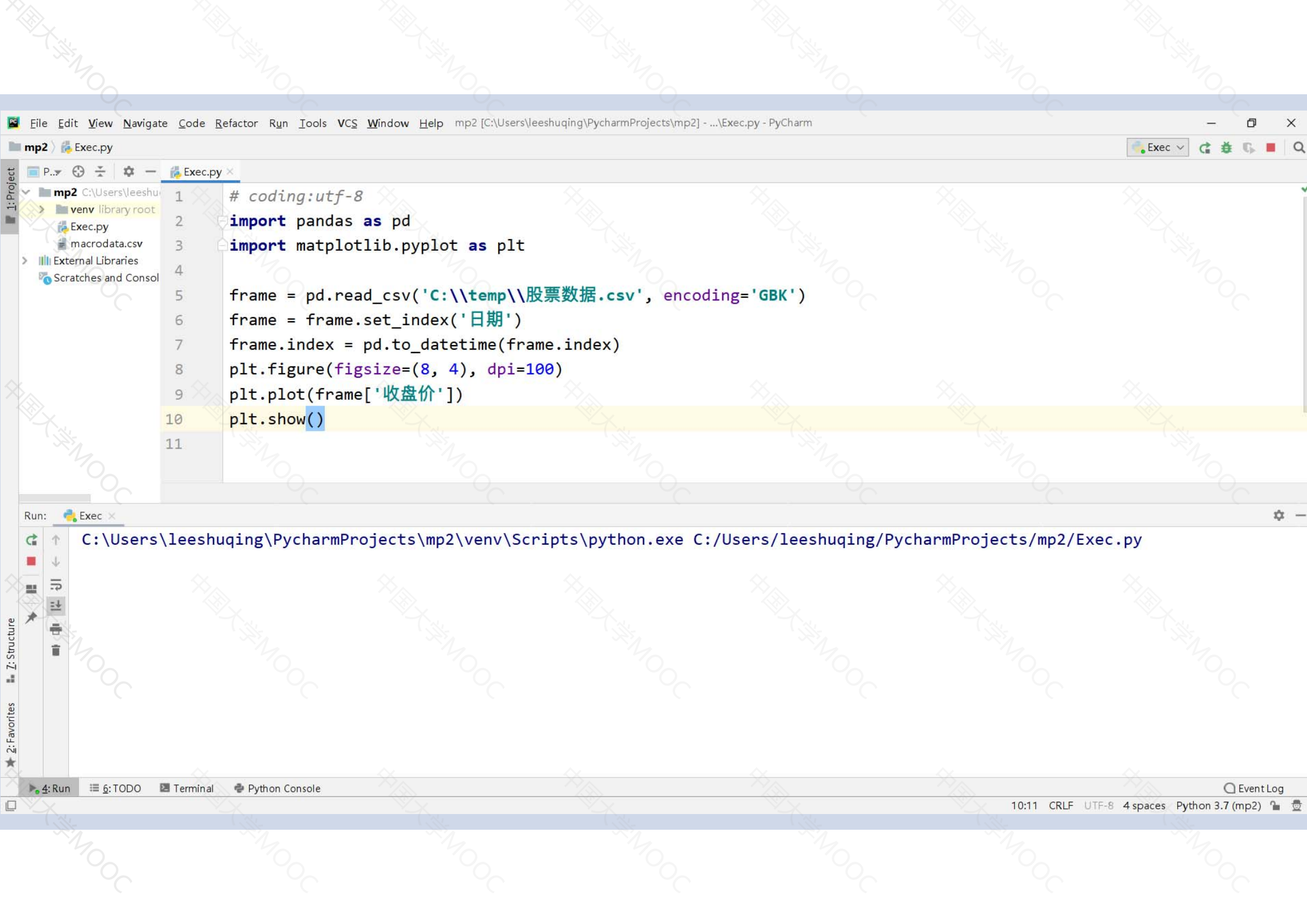


Figure 1

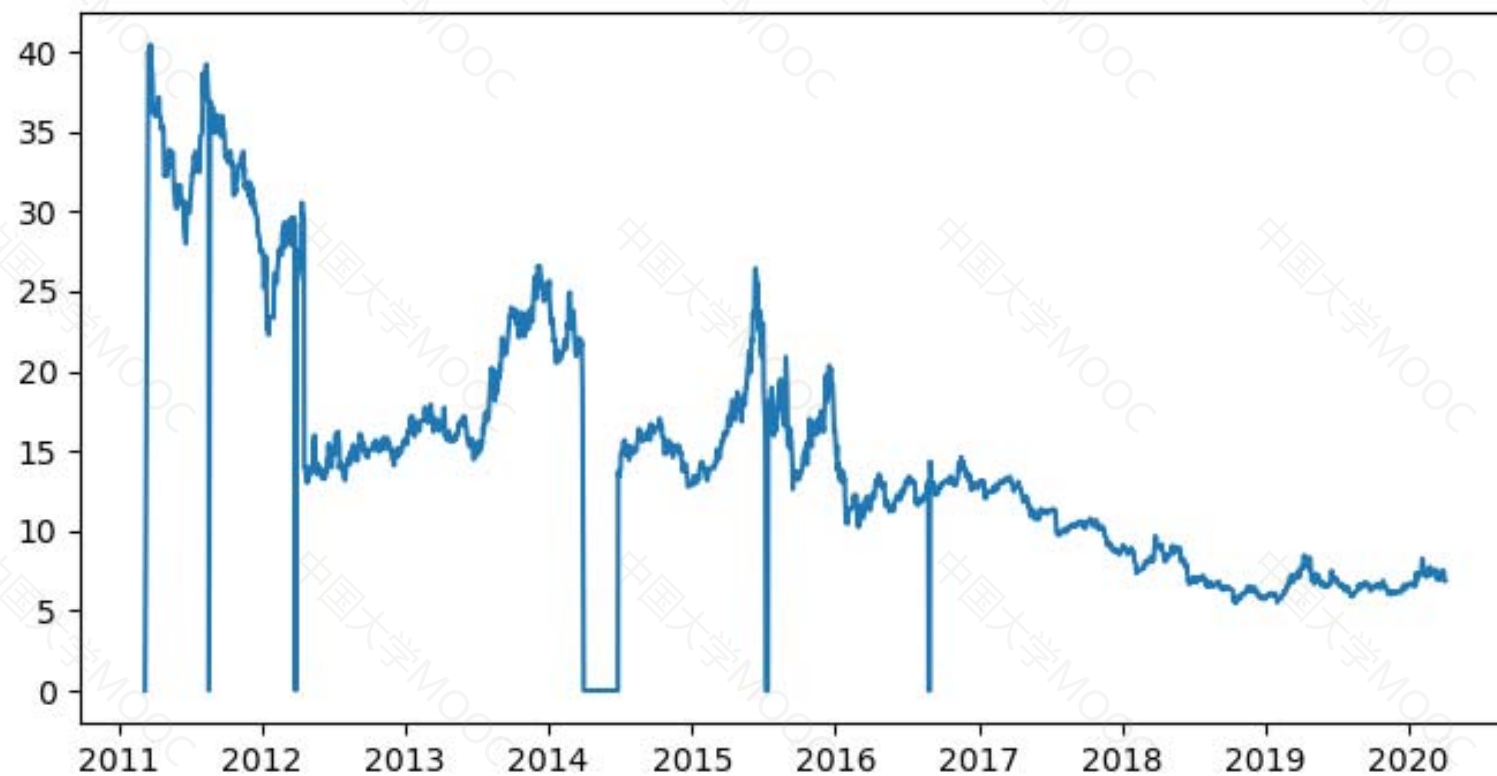
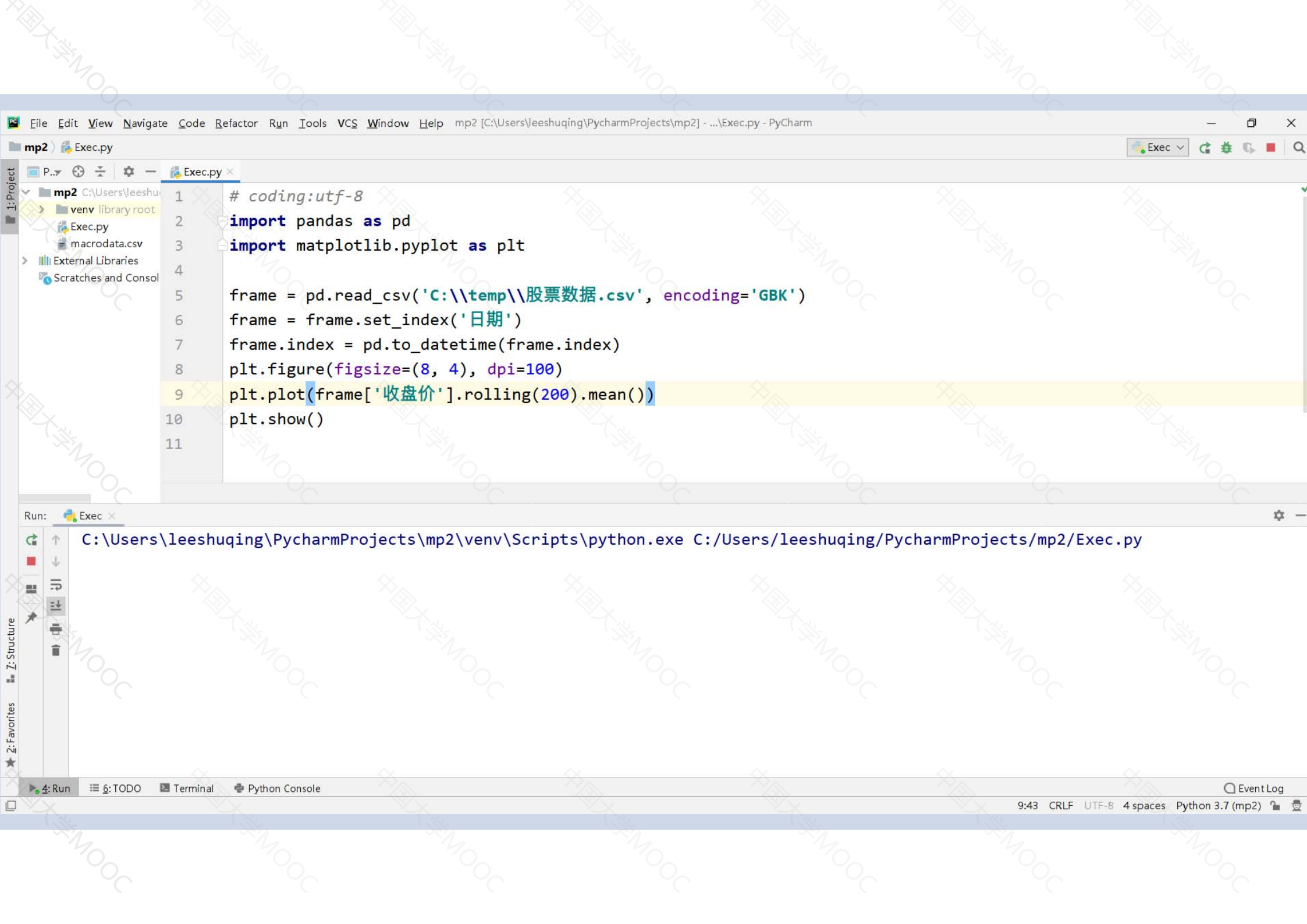




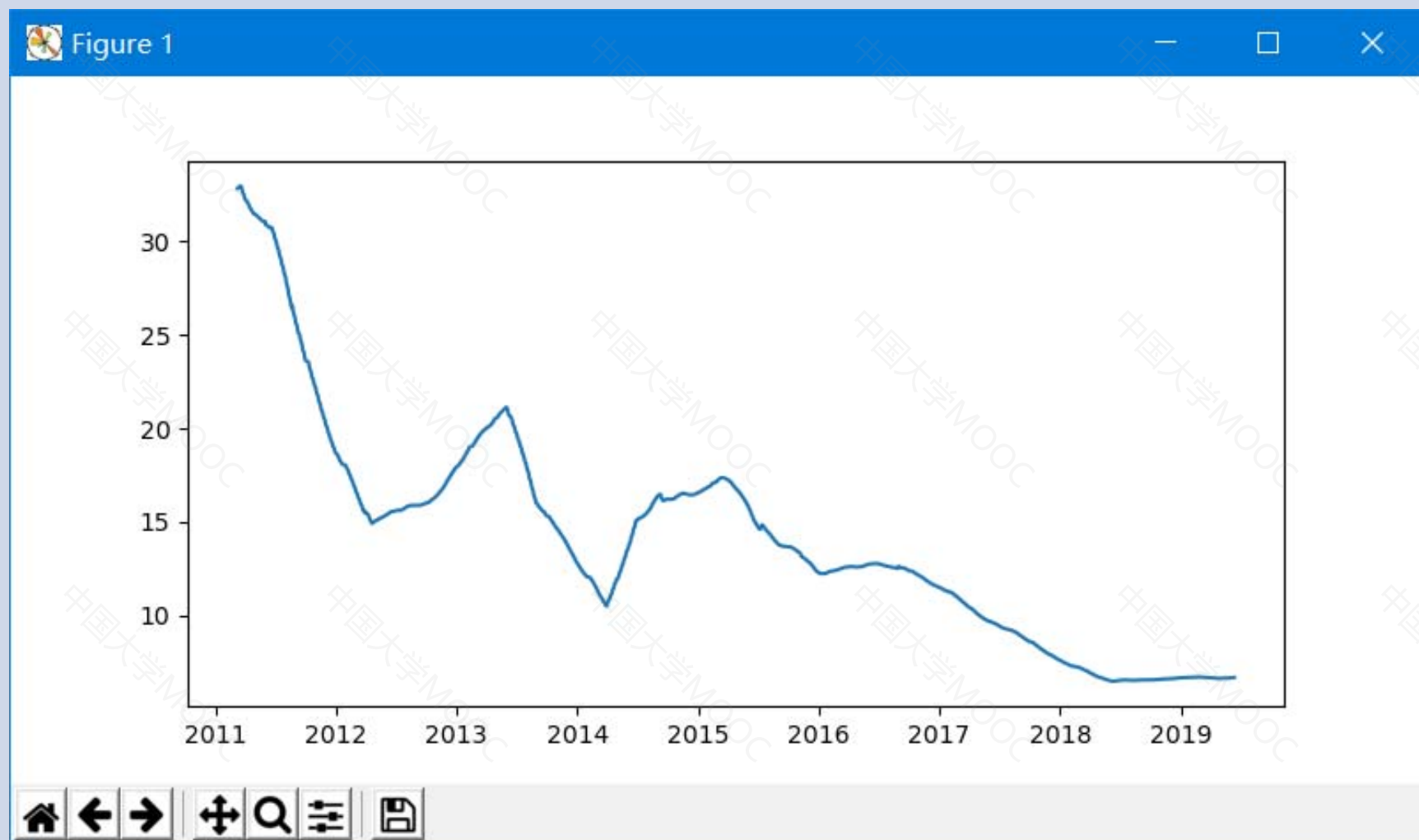
Figure 1: A screenshot of a WPS spreadsheet showing stock data for a company. The data is organized in columns A through H, representing various financial metrics over time. The rows are numbered 1 through 14. The data is as follows:

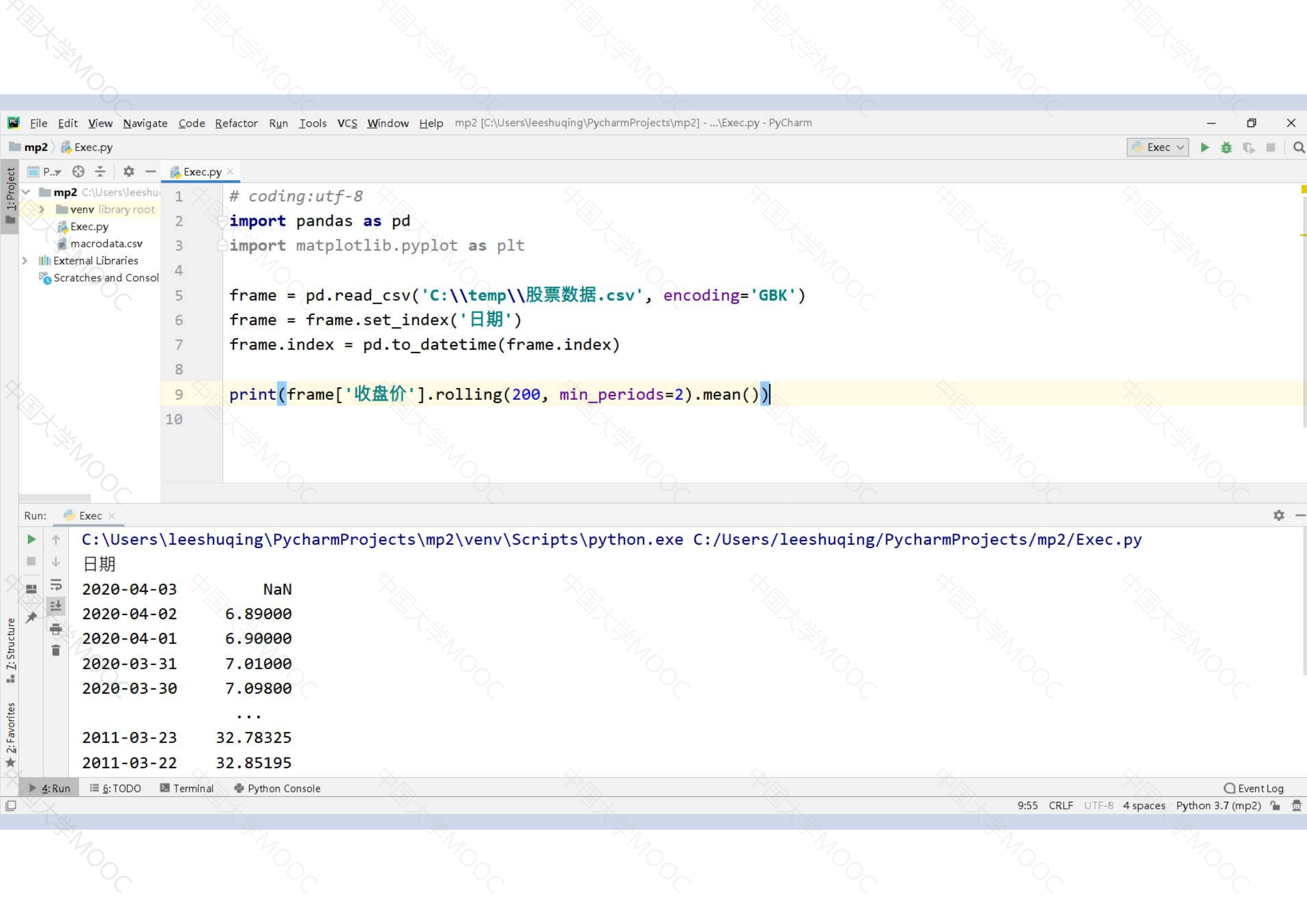
	A	B	C	D	E	F	G	H	I
1	日期	收盘价	最高价	最低价	开盘价	前收盘	涨跌额	涨跌幅	换手率
2	2020/4/3	6.87	7.01	6.85	6.91	6.91	-0.04	-0.5789	0.01
3	2020/4/2	6.91	6.94	6.77	6.82	6.92	-0.01	-0.1445	0.01
4	2020/4/1	6.92	7.25	6.87	7.22	7.34	-0.42	-5.7221	0.01
5	2020/3/31	7.34	7.5	7.27	7.45	7.45	-0.11	-1.4765	1.01
6	2020/3/30	7.45	7.62	7.3	7.35	7.38	0.07	0.9485	1.01
7	2020/3/27	7.38	7.64	7.37	7.62	7.53	-0.15	-1.992	1.01
8	2020/3/26	7.53	7.62	7.17	7.2	7.29	0.24	3.2922	2.01
9	2020/3/25	7.29	7.33	7.15	7.28	7.2	0.09	1.25	1.01
10	2020/3/24	7.2	7.24	7.05	7.12	6.99	0.21	3.0043	0.01
11	2020/3/23	6.99	7.14	6.92	7.05	7.12	-0.13	-1.8258	0.01
12	2020/3/20	7.12	7.14	6.98	7.04	7	0.12	1.7143	0.01
13	2020/3/19	7	7.08	6.82	6.95	7.04	-0.04	-0.5682	0.01
14	2020/3/18	7.04	7.08	7.04	7.06	7.01	0.03	0.4286	1.01

The spreadsheet interface includes a top menu bar with options like '文件' (File), '开始' (Start), '插入' (Insert), '页面布局' (Page Layout), '公式' (Formulas), '数据' (Data), '审阅' (Review), '视图' (View), '安全' (Security), '开发工具' (Developer Tools), '特色应用' (Featured Applications), and '文档' (Documents). The status bar at the bottom shows '求和=57万0912 平均值=4万3916.307692308 计数=13' and a zoom level of 175%.









```
1 # coding:utf-8
2 import pandas as pd
3 import matplotlib.pyplot as plt
4
5 frame = pd.read_csv('C:\\temp\\股票数据.csv', encoding='GBK')
6 frame = frame.set_index('日期')
7 frame.index = pd.to_datetime(frame.index)
8
9 print(frame['收盘价'].rolling(200, min_periods=2).mean())
10
```

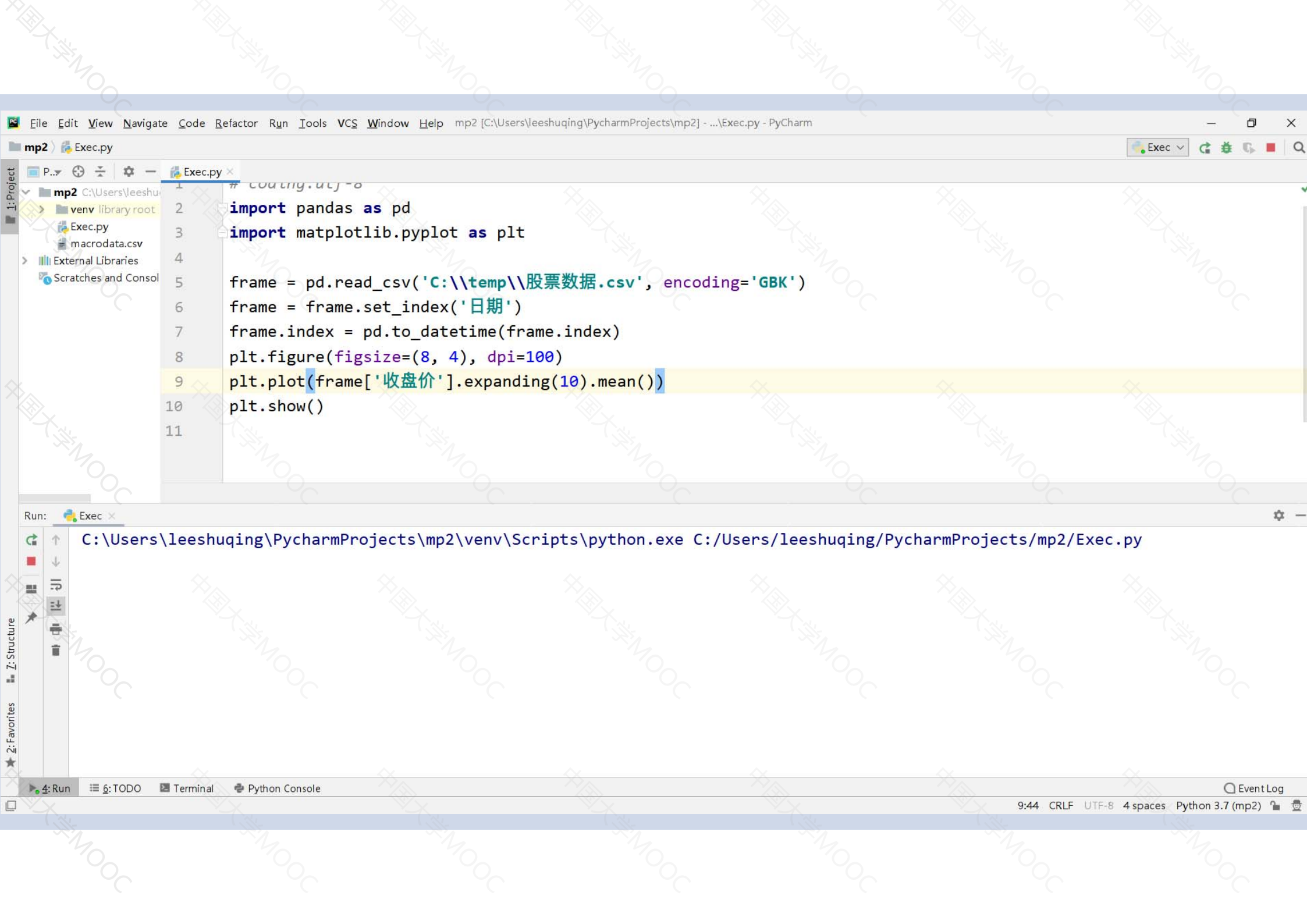
Run: Exec x C:\Users\leeshuqing\PycharmProjects\mp2\venv\Scripts\python.exe C:/Users/leeshuqing/PycharmProjects/mp2/Exec.py

日期	
2020-04-03	NaN
2020-04-02	6.89000
2020-04-01	6.90000
2020-03-31	7.01000
2020-03-30	7.09800
...	
2011-03-23	32.78325
2011-03-22	32.85195

4: Run | TODO | Terminal | Python Console

Event Log

9:55 CRLF UTF-8 4 spaces Python 3.7 (mp2)





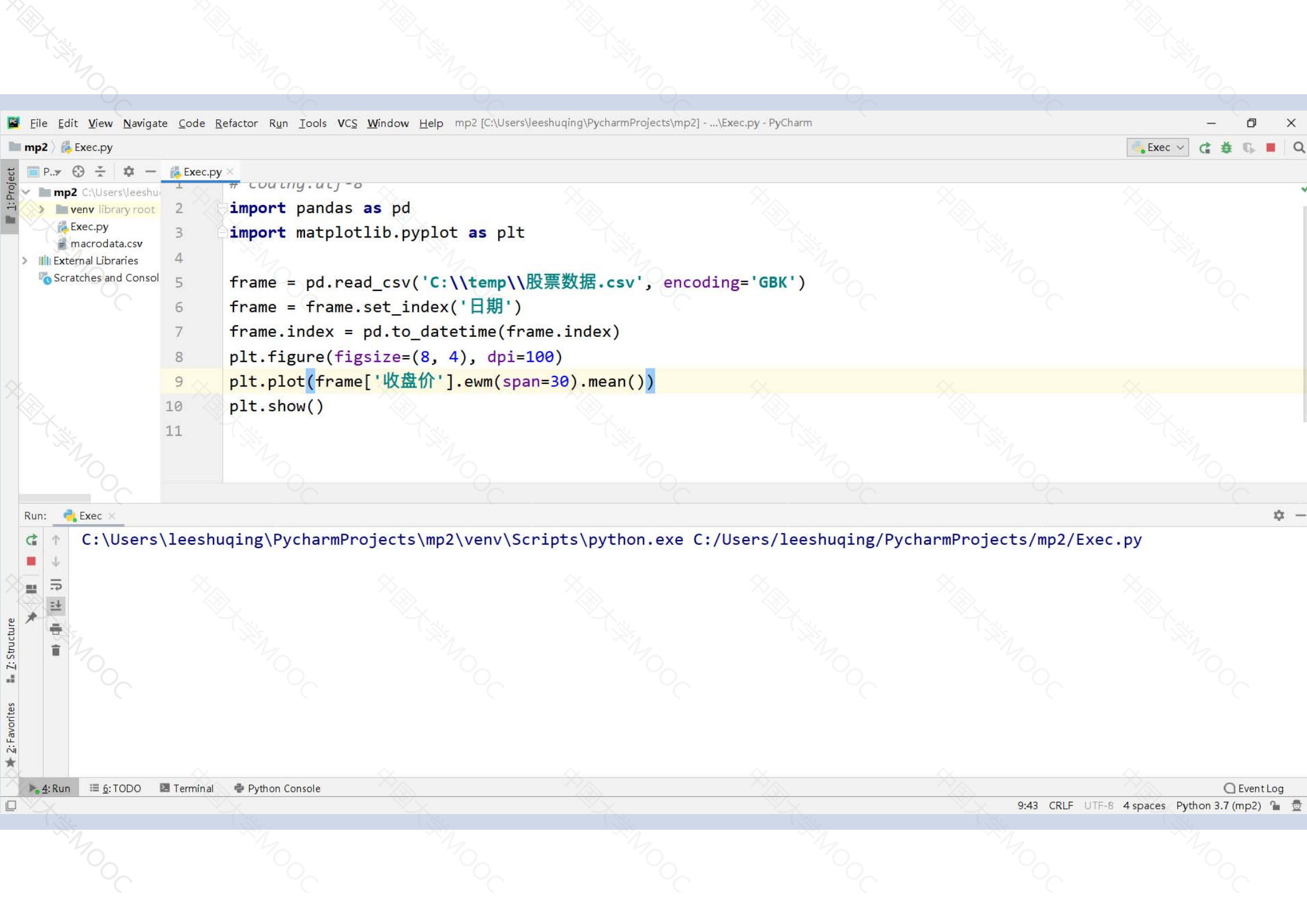
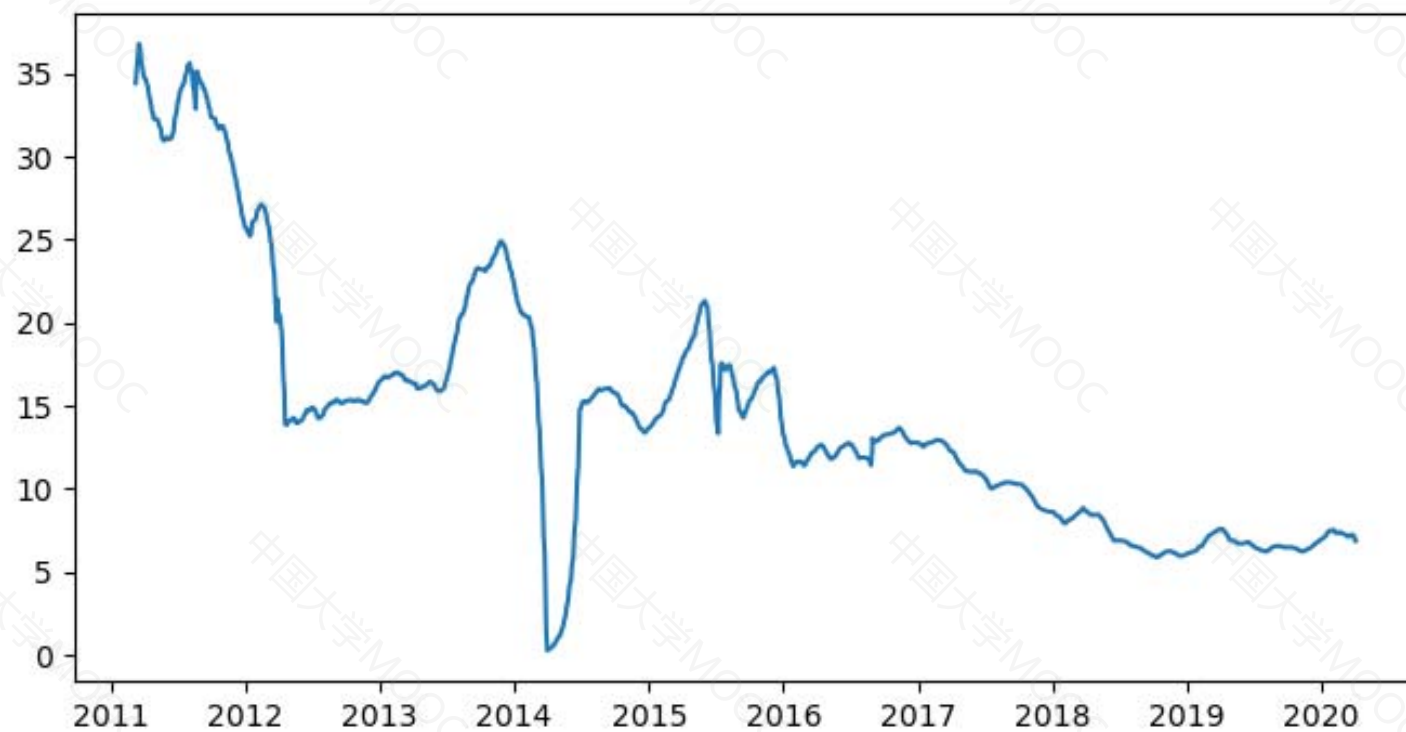
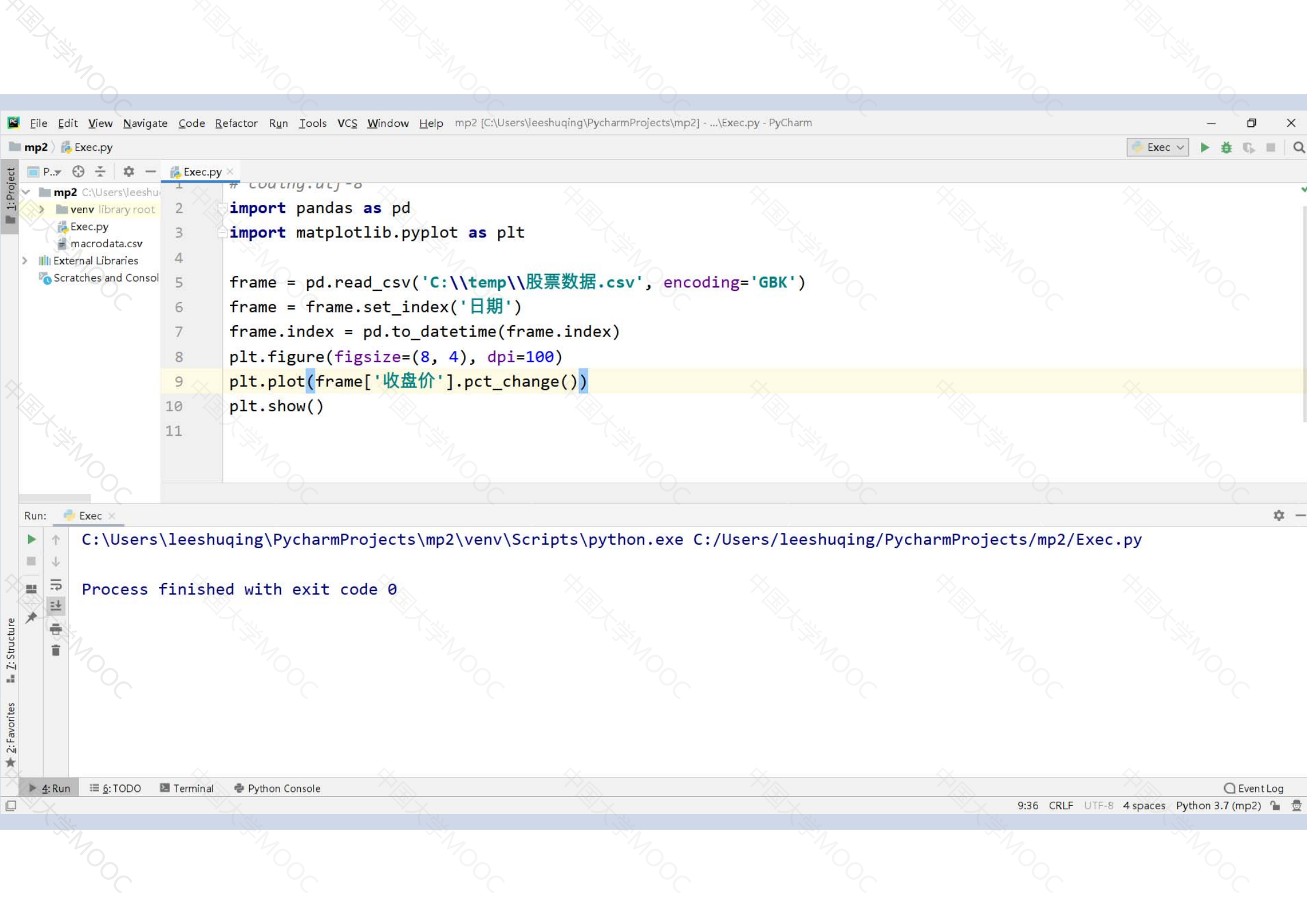


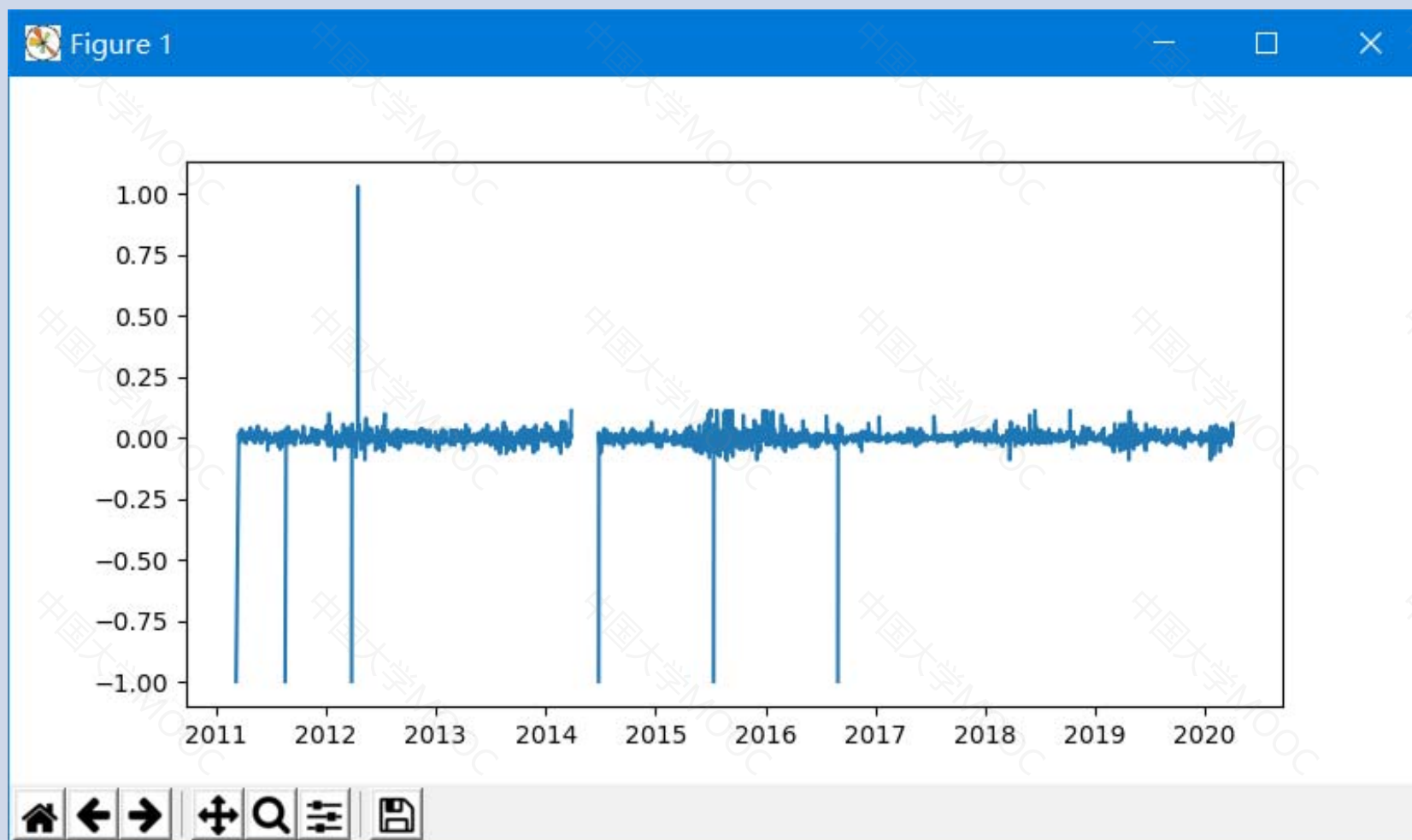


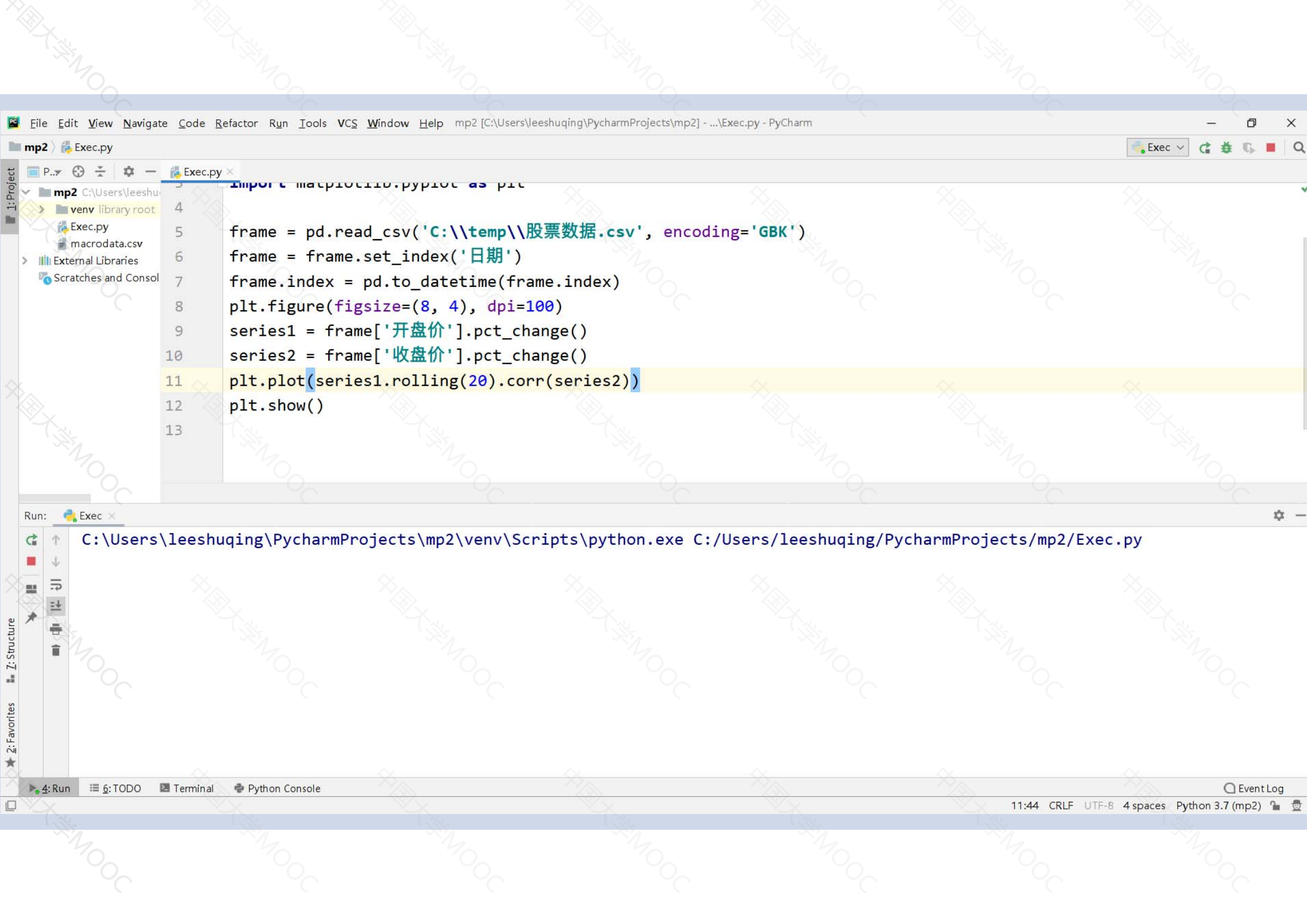
Figure 1

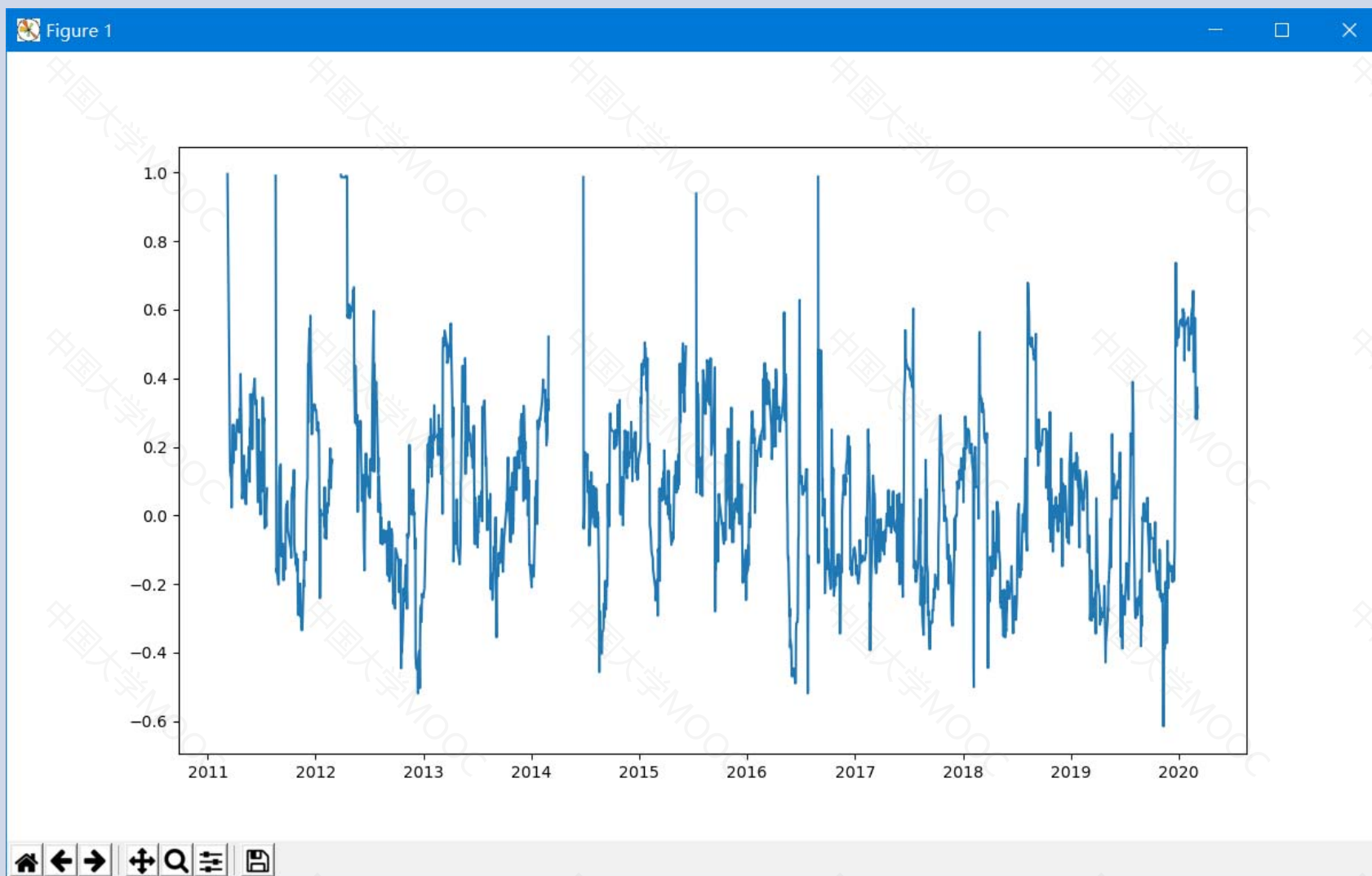


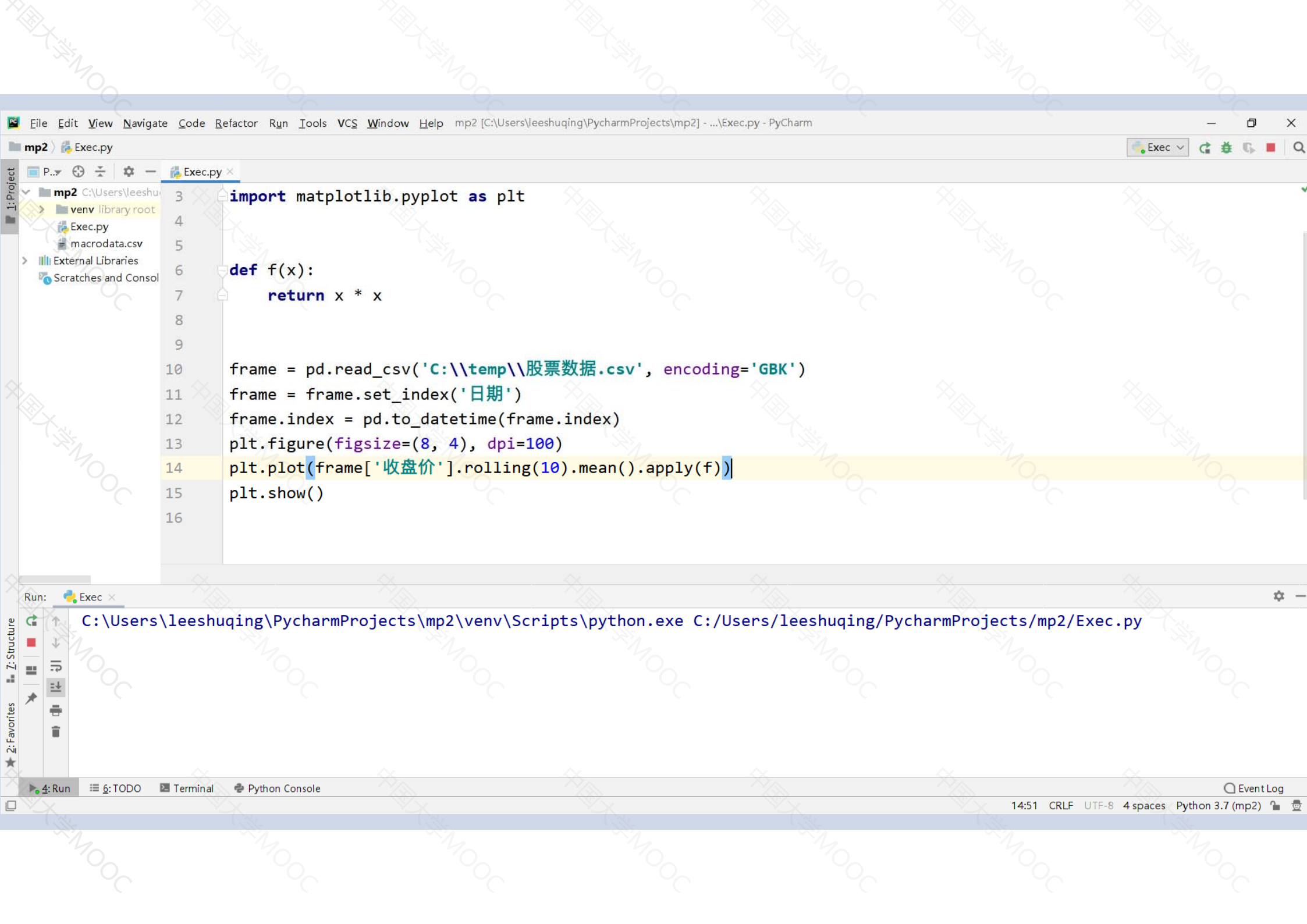












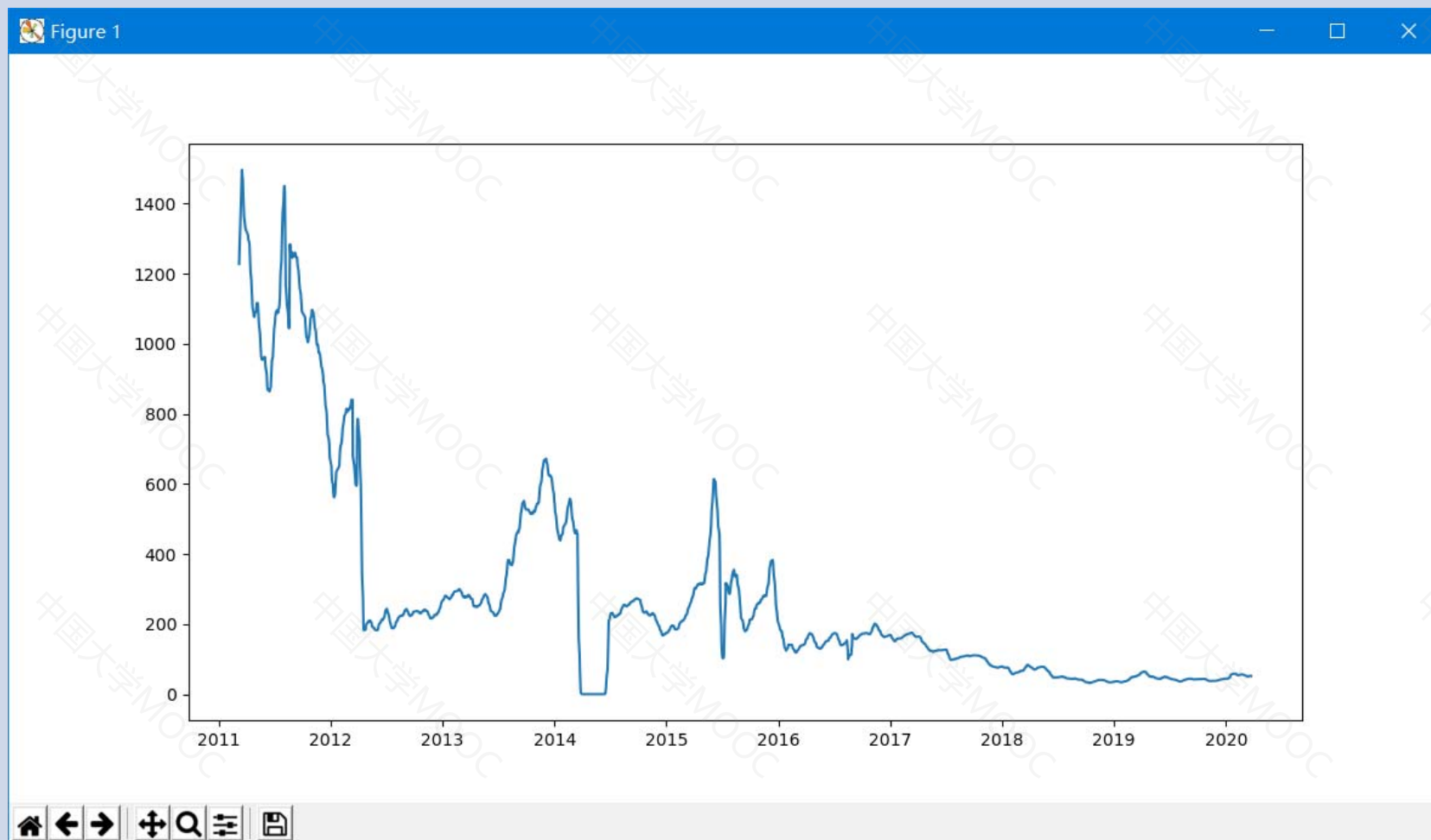
```
1 import matplotlib.pyplot as plt
2
3
4
5
6 def f(x):
7     return x * x
8
9
10 frame = pd.read_csv('C:\\temp\\股票数据.csv', encoding='GBK')
11 frame = frame.set_index('日期')
12 frame.index = pd.to_datetime(frame.index)
13 plt.figure(figsize=(8, 4), dpi=100)
14 plt.plot(frame['收盘价'].rolling(10).mean().apply(f))
15 plt.show()
16
```

Run: Exec x  
C:\Users\leeshuqing\PycharmProjects\mp2\venv\Scripts\python.exe C:/Users/leeshuqing/PycharmProjects/mp2/Exec.py

4: Run | 6: TODO | Terminal | Python Console

Event Log

14:51 CRLF UTF-8 4 spaces Python 3.7 (mp2)





**一次不学多，下次再学**