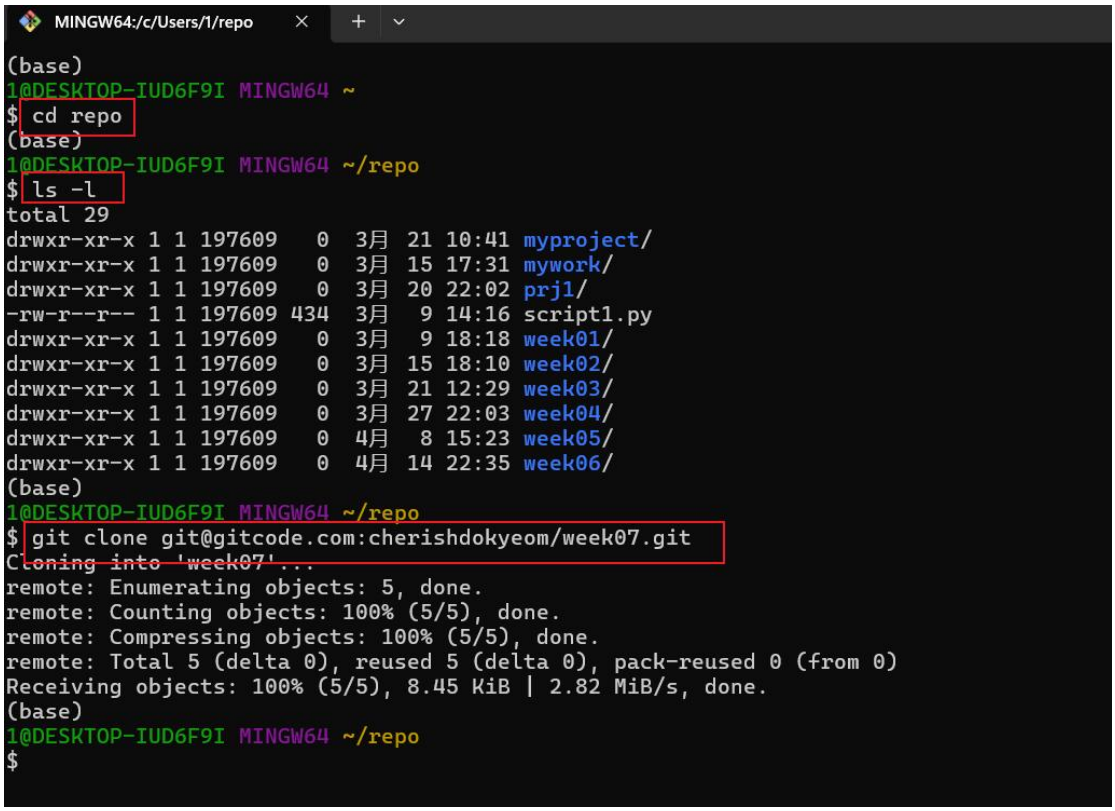
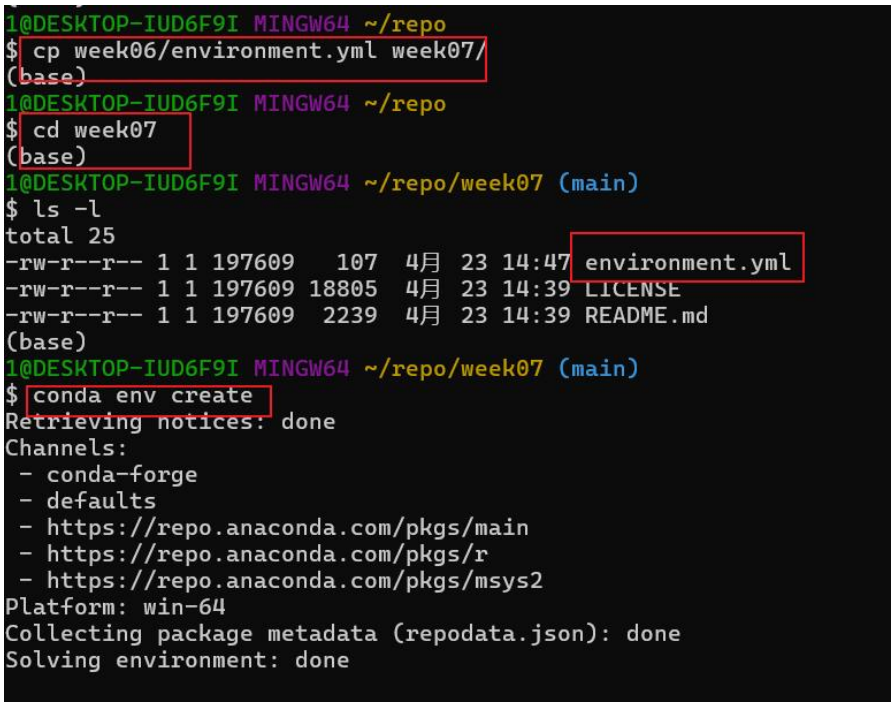
金融编程与计算-学习报告-week07

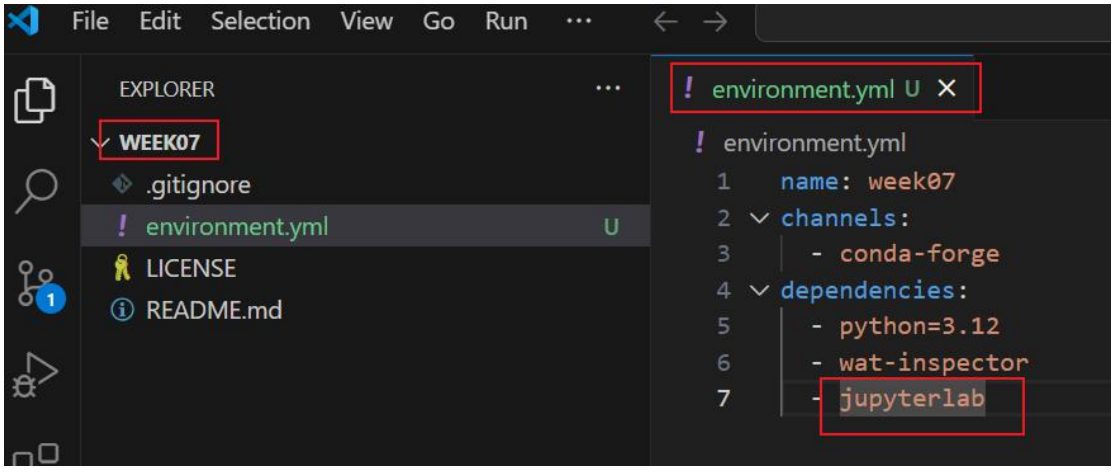
1.Fork 第 07 周打卡仓库至你的名下，然后将你名下的这个仓库 Clone 到你的本地计算机



2.用 VS Code 打开项目目录，新建一个 environment.yml 文件，指定安装 Python 3.12 和 jupyterlab，然后运行 conda env create 命令创建 Conda 环境

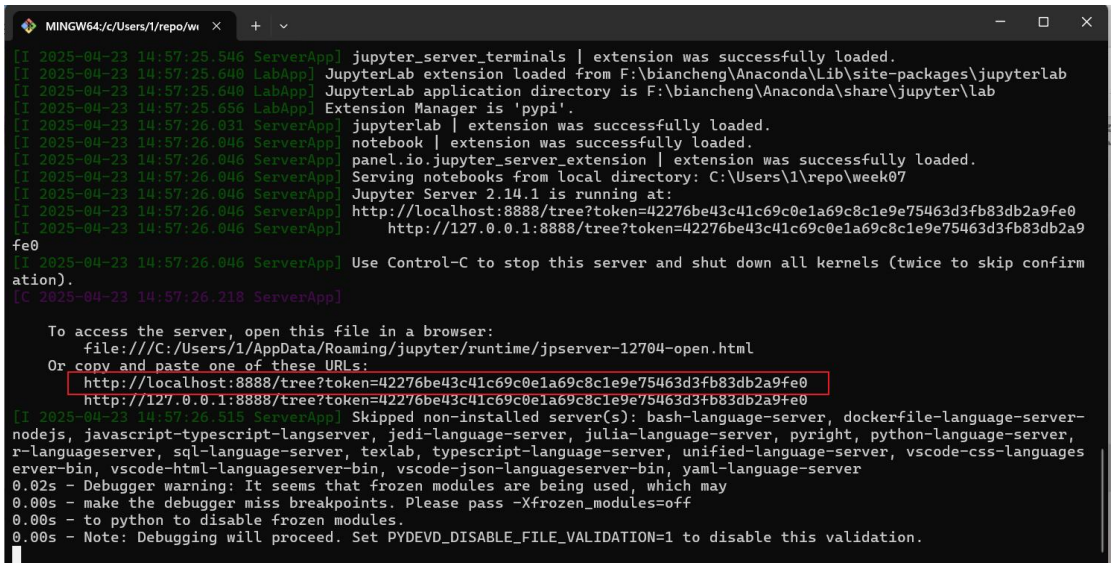


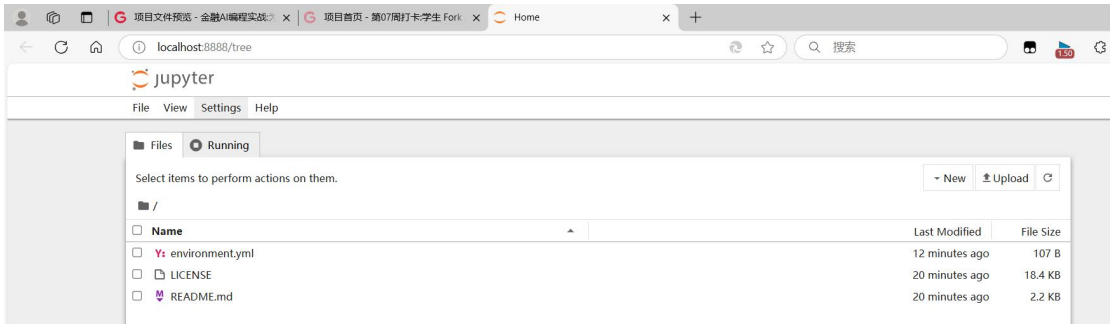
```
Downloading and Extracting Packages:

Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
#     $ conda activate week07
#
# To deactivate an active environment, use
#
#     $ conda deactivate

(base)
1@DESKTOP-IUD6F9I MINGW64 ~/repo/week07 (main)
$ conda activate week07
(week07)
1@DESKTOP-IUD6F9I MINGW64 ~/repo/week07 (main)
$
```

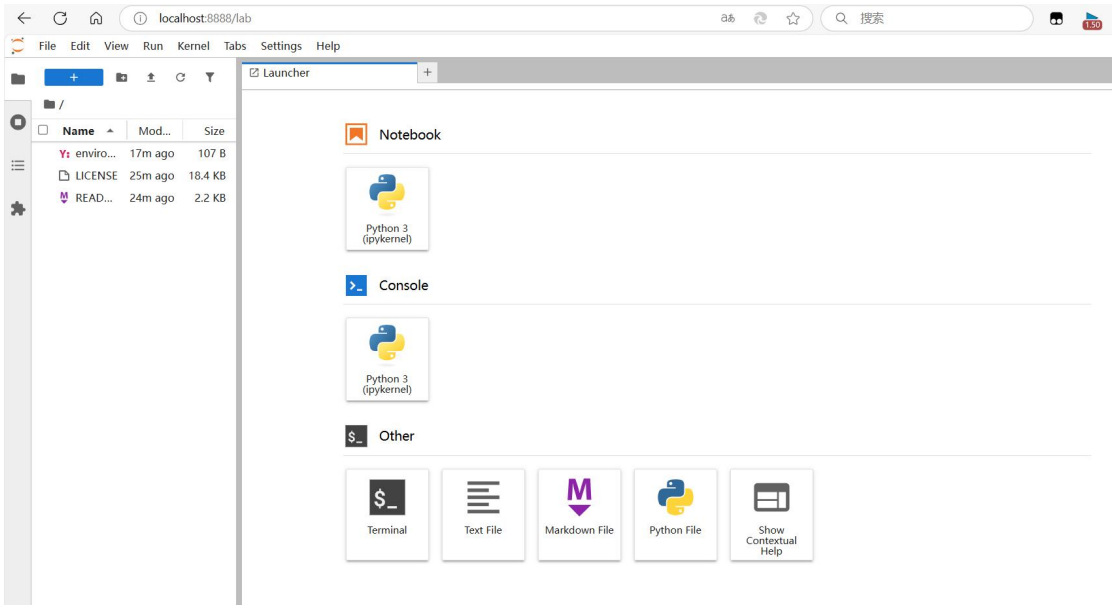


3.在项目目录下，运行 jupyter lab 命令，启动后端（Backend）服务，在浏览器里粘贴地址访问前端（Frontend）页面

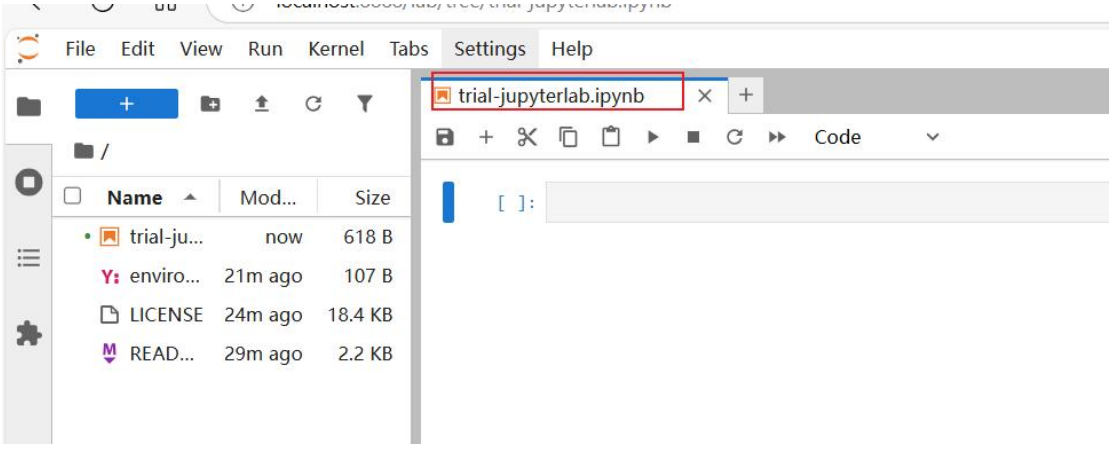
```
$ jupyter notebook
[I 2025-04-23 14:57:10.581 ServerApp] Extension package jupyter_lsp took 0.4360s to import
[W 2025-04-23 14:57:10.581 ServerApp] A `_jupyter_server_extension_points` function was not found in jupyter_lsp. Instead, a `_jupyter_server_extension_paths` function was found and will be used for now. This function name will be deprecated in future releases of Jupyter Server.
[I 2025-04-23 14:57:11.034 ServerApp] Extension package jupyter_server_terminals took 0.4506s to import
[W 2025-04-23 14:57:12.502 ServerApp] A `_jupyter_server_extension_points` function was not found in notebook_shim. Instead, a `_jupyter_server_extension_paths` function was found and will be used for now. This function name will be deprecated in future releases of Jupyter Server.
[I 2025-04-23 14:57:20.969 ServerApp] Extension package panel.io.jupyter_server_extension took 8.4465s to import
[I 2025-04-23 14:57:20.969 ServerApp] jupyter_lsp | extension was successfully linked.
[I 2025-04-23 14:57:20.985 ServerApp] jupyter_server_terminals | extension was successfully linked.
[I 2025-04-23 14:57:20.985 ServerApp] jupyterlab | extension was successfully linked.
[I 2025-04-23 14:57:21.000 ServerApp] notebook | extension was successfully linked.
[I 2025-04-23 14:57:21.000 ServerApp] Writing Jupyter server cookie secret to C:\Users\1\AppData\Roaming\jupyter\runtime\jupyter_cookie_secret
[I 2025-04-23 14:57:25.265 ServerApp] notebook_shim | extension was successfully linked.
[I 2025-04-23 14:57:25.265 ServerApp] panel.io.jupyter_server_extension | extension was successfully linked.
[I 2025-04-23 14:57:25.531 ServerApp] notebook_shim | extension was successfully loaded.
[I 2025-04-23 14:57:25.546 ServerApp] jupyter_lsp | extension was successfully loaded.
[I 2025-04-23 14:57:25.546 ServerApp] jupyter_server_terminals | extension was successfully loaded.
[I 2025-04-23 14:57:25.640 LabApp] JupyterLab extension loaded from F:\biancheng\Anaconda\Lib\site-packages\jupyterlab
[I 2025-04-23 14:57:25.640 LabApp] JupyterLab application directory is F:\biancheng\Anaconda\share\jupyter\lab
[I 2025-04-23 14:57:25.656 LabApp] Extension Manager is 'pypi'.
[I 2025-04-23 14:57:26.031 ServerApp] jupyterlab | extension was successfully loaded.
[I 2025-04-23 14:57:26.046 ServerApp] notebook | extension was successfully loaded.
[I 2025-04-23 14:57:26.046 ServerApp] panel.io.jupyter_server_extension | extension was successfully loaded.
[I 2025-04-23 14:57:26.046 ServerApp] Serving notebooks from local directory: C:\Users\1\repo\week07
[I 2025-04-23 14:57:26.046 ServerApp] Jupyter Server 2.14.1 is running at:
```

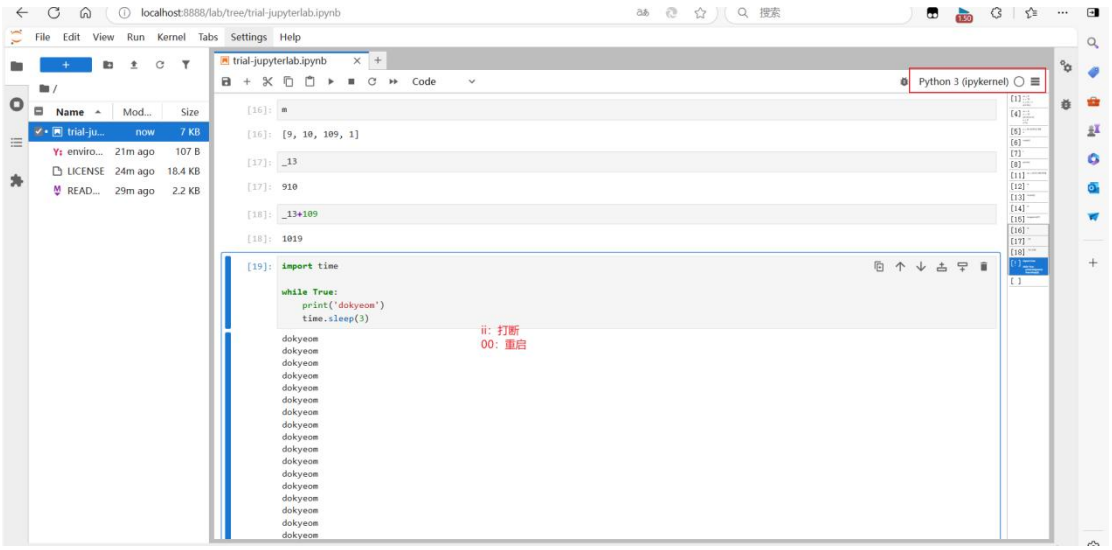


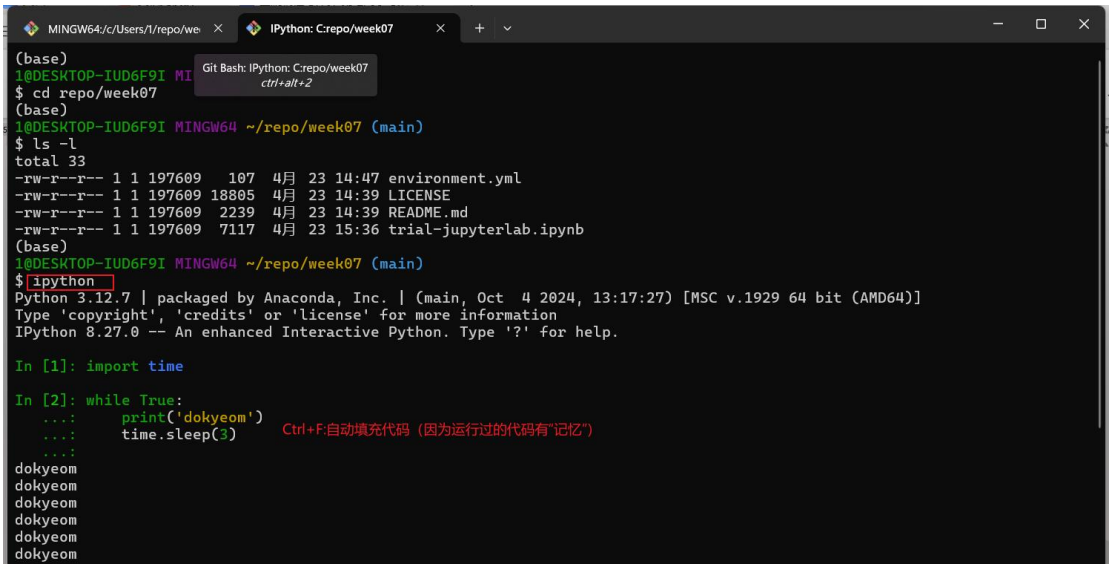




4.在 JupyterLab 页面里，新建一个 Notebook，改名为 trial-jupyterlab.ipynb

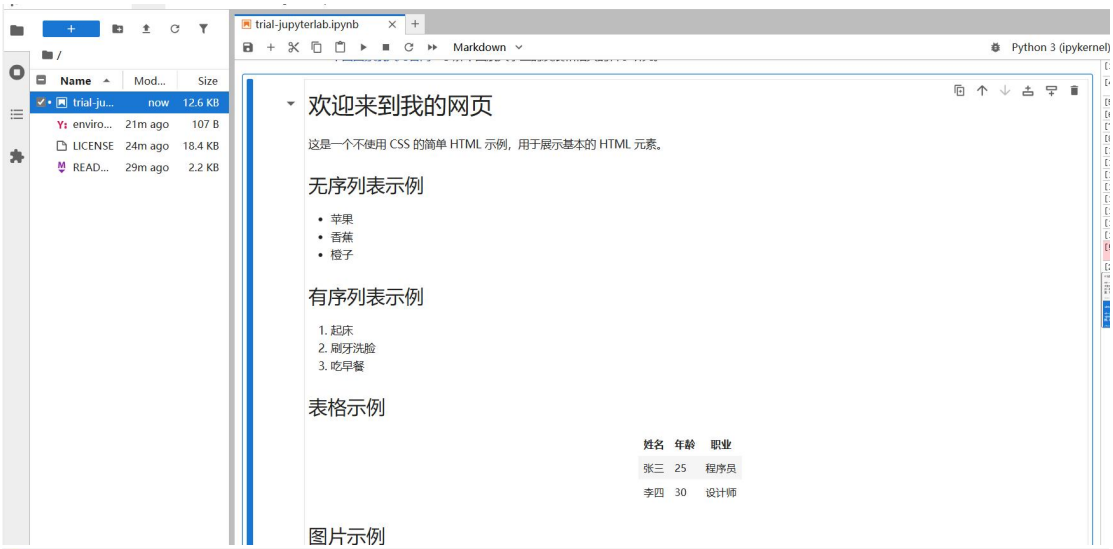

File Edit View Run Kernel Tabs Settings Help
trial-jupyterlab.ipynb
Code
[ ]:
Name
Mod...
Size
trial-ju... now 618 B
enviro... 21m ago 107 B
LICENSE 24m ago 18.4 KB
READ... 29m ago 2.2 KB

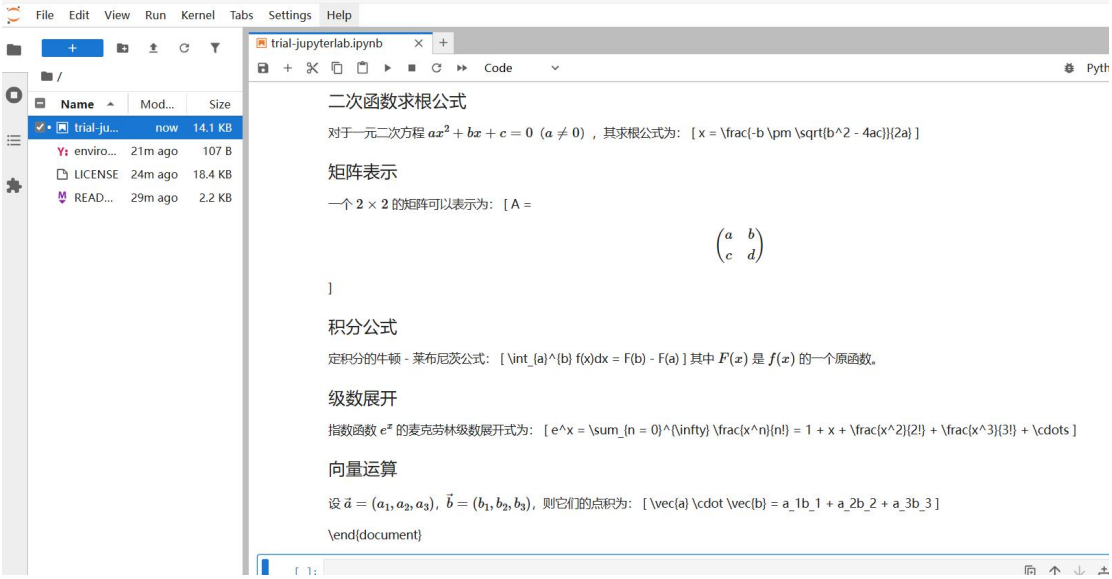

localhost:8888/lab/tree/trial-jupyterlab.ipynb
File Edit View Run Kernel Tabs Settings Help
trial-jupyterlab.ipynb
Code
Python 3 (ipykernel)
[16]: m
[16]: [9, 10, 109, 1]
[17]: _13
[17]: 910
[18]: _13+109
[18]: 1019
[19]: import time
while True:
print('dokyeom')
time.sleep(3)
ii: 打断
00: 重启
dokyeom


MINGW64:/c/Users/1/repo/we
IPython: C:repo/week07
Git Bash: IPython: C:repo/week07
ctrl+alt+2
(base)
1@DESKTOP-IUD6F9I MI
$ cd repo/week07
(base)
1@DESKTOP-IUD6F9I MINGW64 ~/repo/week07 (main)
$ ls -l
total 33
-rw-r--r-- 1 1 197609 107 4月 23 14:47 environment.yml
-rw-r--r-- 1 1 197609 18805 4月 23 14:39 LICENSE
-rw-r--r-- 1 1 197609 2239 4月 23 14:39 README.md
-rw-r--r-- 1 1 197609 7117 4月 23 15:36 trial-jupyterlab.ipynb
(base)
1@DESKTOP-IUD6F9I MINGW64 ~/repo/week07 (main)
$ ipython
Python 3.12.7 | packaged by Anaconda, Inc. | (main, Oct 4 2024, 13:17:27) [MSC v.1929 64 bit (AMD64)]
Type 'copyright', 'credits' or 'license' for more information
IPython 8.27.0 -- An enhanced Interactive Python. Type '?' for help.
In [1]: import time
In [2]: while True:
...: print('dokyeom')
...: time.sleep(3)
Ctrl+F:自动填充代码（因为运行过的代码有"记忆"）
...:
dokyeom
dokyeom
dokyeom
dokyeom
dokyeom
dokyeom


x = "mingyu"
print(x)
前面没有小框，因为按了"m"，进入了Markdown模式；按"y"，进入Python模式
[ ]:

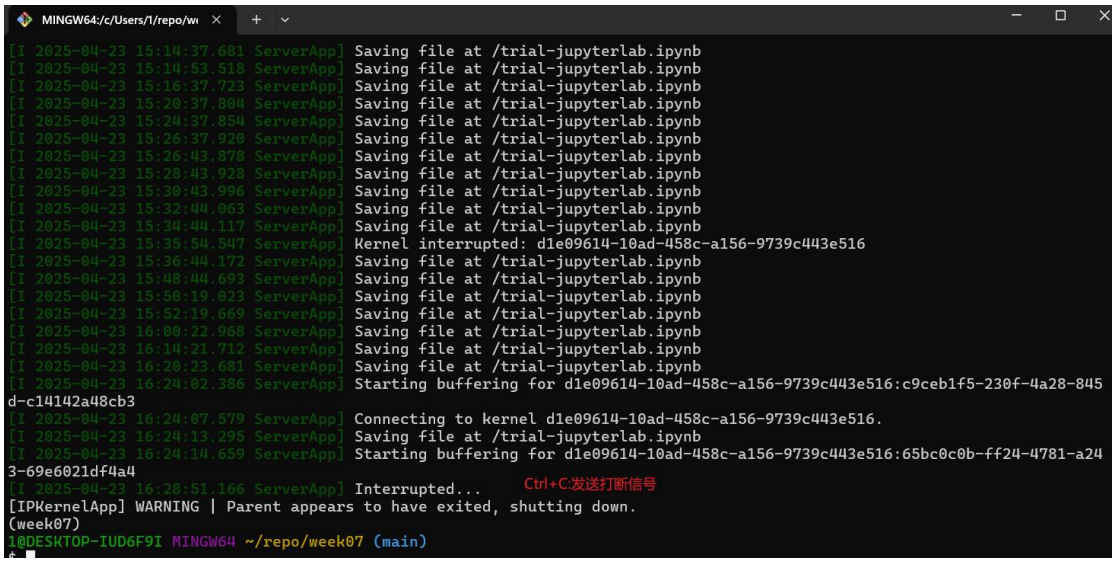

File Edit View Run Kernel Tabs Settings Help
trial-jupyterlab.ipynb
Markdown
Python 3 (ipykernel)
Name Mod... Size
trial-ju... now 11.2 KB
enviro... 21m ago 107 B
LICENSE 24m ago 18.4 KB
READ... 29m ago 2.2 KB
土星
土星以其壮观的光环而闻名，光环主要由冰和尘埃组成。
五、进一步探索的资源


trial-jupyterlab.ipynb
Markdown
Python 3 (ipykernel)
Name Mod... Size
trial-ju... now 12.6 KB
enviro... 21m ago 107 B
LICENSE 24m ago 18.4 KB
READ... 29m ago 2.2 KB
欢迎来到我的网页
这是一个不使用 CSS 的简单 HTML 示例，用于展示基本的 HTML 元素。
无序列表示例
苹果
香蕉
橙子
有序列表示例
1. 起床
2. 刷牙洗脸
3. 吃早餐
表格示例
姓名 年龄 职业
张三 25 程序员
李四 30 设计师
图片示例

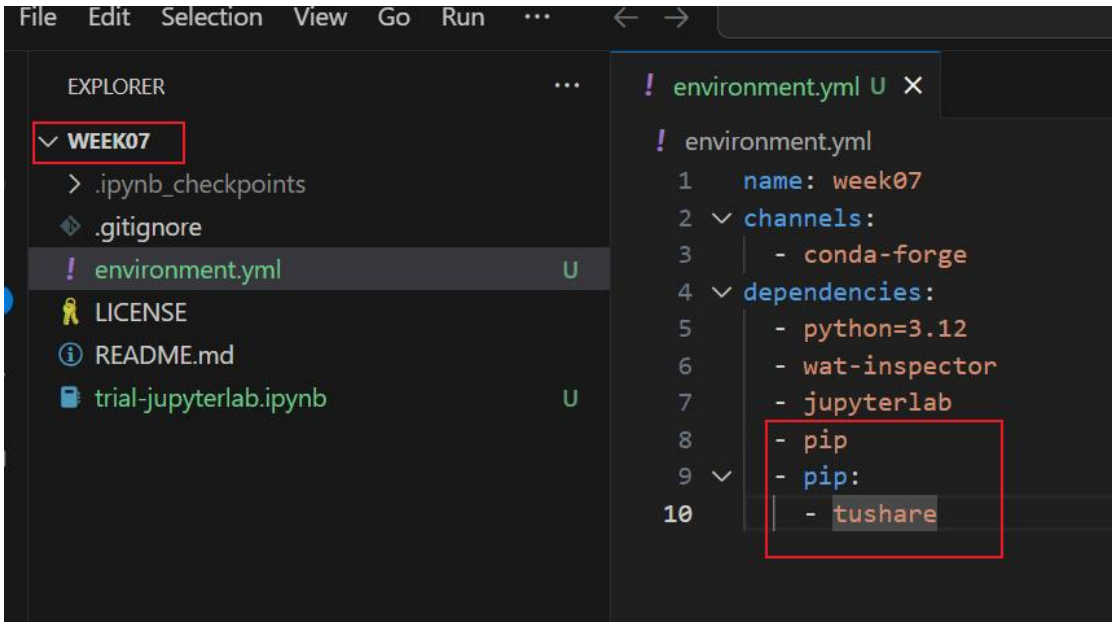

File Edit View Run Kernel Tabs Settings Help
trial-jupyterlab.ipynb
Code
Name Mod... Size
trial-ju... now 14.1 KB
enviro... 21m ago 107 B
LICENSE 24m ago 18.4 KB
READ... 29m ago 2.2 KB
二次函数求根公式
对于一元二次方程 $ax^2 + bx + c = 0$ $(a \neq 0)$，其求根公式为：[x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}]
矩阵表示
一个 2×2 的矩阵可以表示为：[A =
$$\begin{pmatrix} a & b \\ c & d \end{pmatrix}$$
]
积分公式
定积分的牛顿 - 莱布尼茨公式：[\int_{a}^{b} f(x)dx = F(b) - F(a)] 其中 $F(x)$ 是 $f(x)$ 的一个原函数。
级数展开
指数函数 e^x 的麦克劳林级数展开式为：[e^x = \sum_{n = 0}^{\infty} \frac{x^n}{n!} = 1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + \cdots]
向量运算
设 $\vec{a} = (a_1, a_2, a_3)$，$\vec{b} = (b_1, b_2, b_3)$，则它们的点积为：[\vec{a} \cdot \vec{b} = a_1b_1 + a_2b_2 + a_3b_3]
\end{document}

4. 在 JupyterLab 页面里，新建一个 Notebook，改名为 `trial-jupyterlab.ipynb`，在里面实践掌握以下功能：

    - 在单元格 (Cell) 里编写 Python 代码，按 `Shift+Enter` 运行 Cell 并下移
    - 在单元格 (Cell) 上按 `ESC` 切换到 **命令模式** (command mode)，按 `Enter` 切换到 **编写模式** (edit mode)
    - 在单元格 (Cell) 的命令模式下，按 `j` 选择下一个，按 `k` 选择上一个，按 `a` 在上方添加，按 `b` 在下方添加，按 `dd` 删除，按住 `Shift` 多选，按 `x` 剪切，按 `c` 复制，按 `v` 粘贴，按 `Shift+M` 合并，按 `z` 撤销，按 `Shift+Z` 重做，按 `Shift+L` 显示/隐藏代码行号
    - 在单元格 (Cell) 的编写模式下，按 `Ctrl+Shift+-` 切分单元格
    - 按按钮显示/隐藏 Minimap
    - 运行单元格 (Cell) 注意序号单调递增
    - 单元格最后一行如果是 **表达式** (expression) 且运行后返回的对象不是 `None`，则计输出 (Out)，否则只计输入 (In)，序号为 `i` 的输出，可以用 `_i` 变量来引用
    - 单元格 (Cell) 序号为 `*` 表示代码运行中，尚未返回，按 `ii` 可以打断 (`KeyboardInterrupt`) (类似于终端的 `Ctrl+C`)
    - 在单元格 (Cell) 的命令模式下，按 `00` 重启后端 Python 解释器 (被 Jupyter 称为 Kernel)，重启后需要从上至下重新运行一遍代码 (`Shift+Enter`)，运行前建议先在菜单里选择 “Edit / Clear Outputs of All Cells” 清空全部页面显示的输出
    - 在单元格 (Cell) 的命令模式下，按 `m` 切换至 **Markdown 模式**，按 `y` 切换至 **Python 模式**
    - 用豆包 (或 DeepSeek 等任何大模型) 生成一段示例 Markdown 代码，复制粘贴进 Markdown 单元格，运行以呈现 (Render)



5.通过 tushare 软件包下载保存一些数据



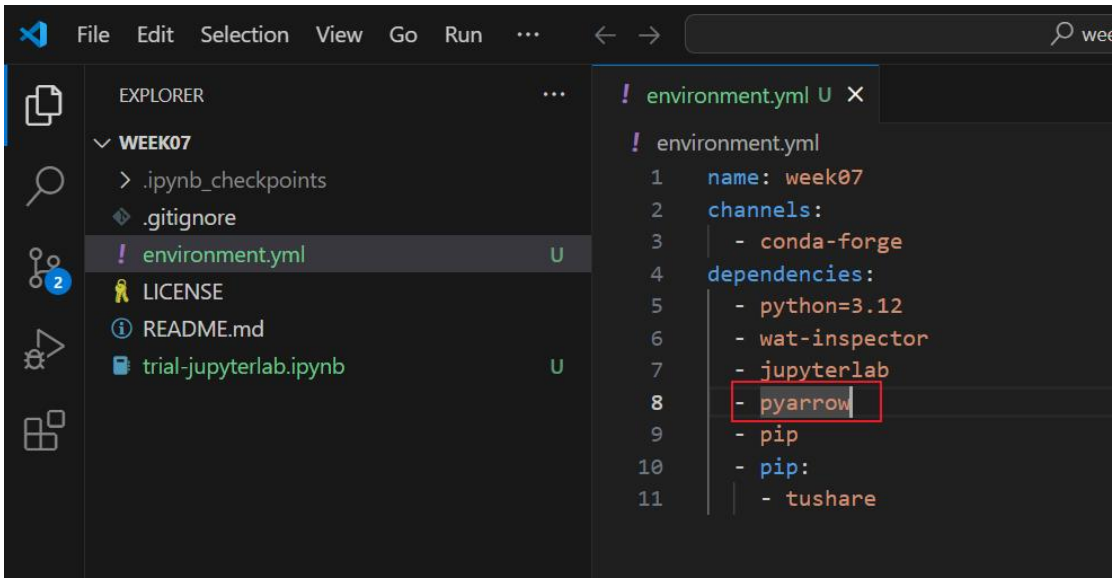

```
1@DESKTOP-IUD6F9I MINGW64 ~/repo/week07 (main)
$ conda env update
Channels:
 - conda-forge
 - defaults
 - https://repo.anaconda.com/pkgs/main
 - https://repo.anaconda.com/pkgs/r
 - https://repo.anaconda.com/pkgs/msys2
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done
Installing pip dependencies: / Ran pip subprocess with arguments:
['F:\\biancheng\\Anaconda\\envs\\week07\\python.exe', '-m', 'pip', 'install', '-U', '-r', 'C:\\Users\\1\\repo\\week07\\]
Pip subprocess output:
Looking in indexes: https://mirrors.tuna.tsinghua.edu.cn/pypi/web/simple
Collecting tushare (from -r C:\Users\1\repo\week07\condaenv.bmexl6xo.requirements.txt (line 1))
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/38/33/0b4ed09bff3b69887c2545f1c587420c89685d36c377)
Collecting pandas (from tushare->-r C:\Users\1\repo\week07\condaenv.bmexl6xo.requirements.txt (line 1))
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/29/d4/1244ab8edf173a10fd601f7e13b9566c1b525c4f365d)
     ---------------------------------------- 11.5/11.5 MB 5.8 MB/s eta 0:00:00
Requirement already satisfied: requests in f:\biancheng\anaconda\envs\week07\lib\site-packages (from tushare->-r C:\Use)
```

```
(week07)
1@DESKTOP-IUD6F9I MINGW64 ~/repo/week07 (main)
$ ipython
Python 3.12.10 | packaged by conda-forge | (main, Apr 10 2025, 22:08:16) [MSC v.1943 64 bit (AMD64)]
Type 'copyright', 'credits' or 'license' for more information
IPython 9.1.0 -- An enhanced Interactive Python. Type '?' for help.
Tip: Use `%timeit` or `%%timeit`, and the `-r`, `-n`, and `-o` options to easily profile your code.

In [1]: import tushare as ts

In [2]: quit
(week07)
1@DESKTOP-IUD6F9I MINGW64 ~/repo/week07 (main)
$ python
Python 3.12.10 | packaged by conda-forge | (main, Apr 10 2025, 22:08:16) [MSC v.1943 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import tushare as ts
>>> ts.set_token("[redacted])
>>> quit()
(week07)
1@DESKTOP-IUD6F9I MINGW64 ~/repo/week07 (main)
$
```

```
lrwxrwxrwx 1 1 197609       54  2月  25  2023  Templates -> /c/Users/1/AppD
-rw-r--r-- 1 1 197609       65  4月  23 16:48  tk.csv
drwxr-xr-x 1 1 197609        0 12月  11 15:48  Tracing/
drwxr-xr-x 1 1 197609        0  2月  25  2023  Videos/
drwxr-xr-x 1 1 197609        0  4月  23 12:14 'WPS Cloud Files'/
drwxr-xr-x 1 1 197609        0 12月  14 15:09  WPSDrive/
```

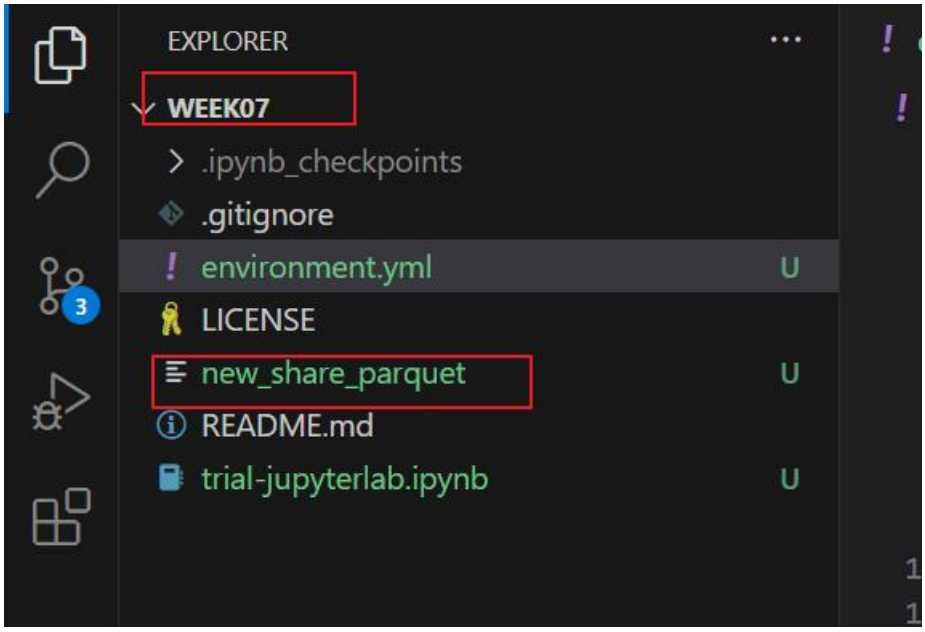
```
1@DESKTOP-IUD6F9I MINGW64 ~
$ cat tk.csv
token
[redacted]
(base)
1@DESKTOP-IUD6F9I MINGW64 ~
$
```

```
(week07)
1@DESKTOP-IUD6F9I MINGW64 ~/repo/week07 (main)
$ ipython
Python 3.12.10 | packaged by conda-forge | (main, Apr 10 2025, 22:08:16) [MSC v.1943 64 bit (AMD64)]
Type 'copyright', 'credits' or 'license' for more information
IPython 9.1.0 -- An enhanced Interactive Python. Type '?' for help.
Tip: Use `object?` to see the help on `object`, `object??` to view its source

In [1]: import tushare as ts

In [2]: pro = ts.pro_api()

In [3]: type(pro)
Out[3]: tushare.pro.client.DataApi

In [4]: id(pro)
Out[4]: 2971725566400

In [5]: pro
Out[5]: <tushare.pro.client.DataApi at 0x2b3e8a591c0>

In [6]: df = pro.new_share()

In [7]: type(df)
Out[7]: pandas.core.frame.DataFrame

In [8]: import wat
```




```
In [1]: import tushare as ts

In [2]: pro = ts.pro_api()

In [3]: df = pro.new_share()

In [4]: df
Out[4]:
        ts_code sub_code  name  ipo_date issue_date  amount  market_amount  price     pe  limit_amount   funds  ballot
0     301636.SZ   301636  泽润新能  20250428       None  1597.0            0.0   0.00   0.00          0.45   0.000    0.
00
1     001400.SZ   001400  江顺科技  20250415   20250424  1500.0         1500.0  37.36  15.32          1.50   5.604    0.
01
2     301560.SZ   301560  众捷汽车  20250415       None  3040.0         1216.0  16.50  21.30          0.70   5.016    0.
02
3     603202.SH   732202   天有为  20250414   20250424  4000.0         2611.0  93.50  13.50          1.25  37.400    0.0
3
4     301662.SZ   301662  宏工科技  20250408   20250417  2000.0          813.0  26.60   7.05          0.45   5.320    0.
02
...         ...      ...   ...       ...        ...     ...             ...    ...    ...           ...     ...      ...
1995  002953.SZ   002953  日丰股份  20190424   20190509  4302.0         3872.0  10.52  16.34          1.70   4.526    0.
03
1996  603697.SH   732697  有友食品  20190423   20190508  7950.0         7155.0   7.87  13.92          3.10   6.257    0.
05
1997  300772.SZ   300772  运达股份  20190417   20190426  7349.0         6614.0   6.52  22.97          2.80   4.792    0.
```

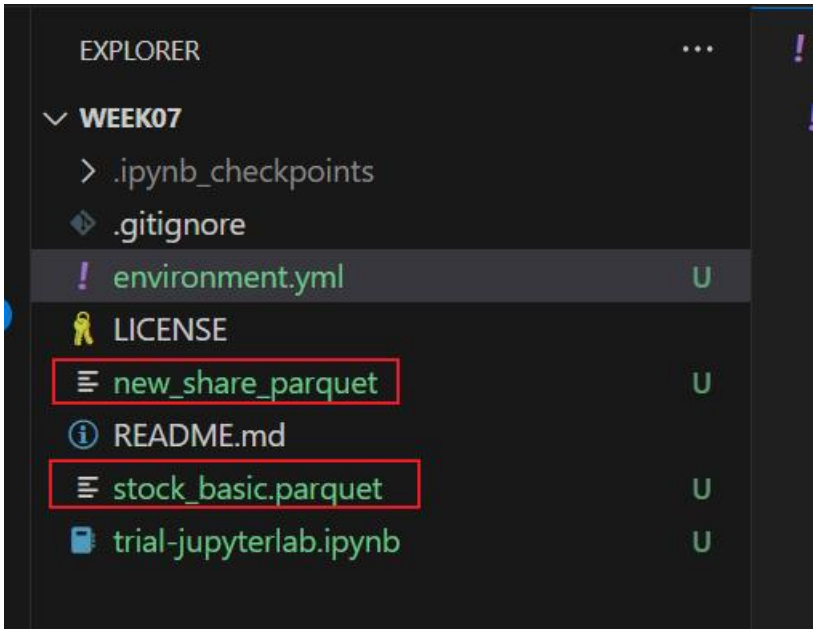
```
[2000 rows x 12 columns]

In [5]: df.to_parquet("new_share_parquet")

In [6]:
```



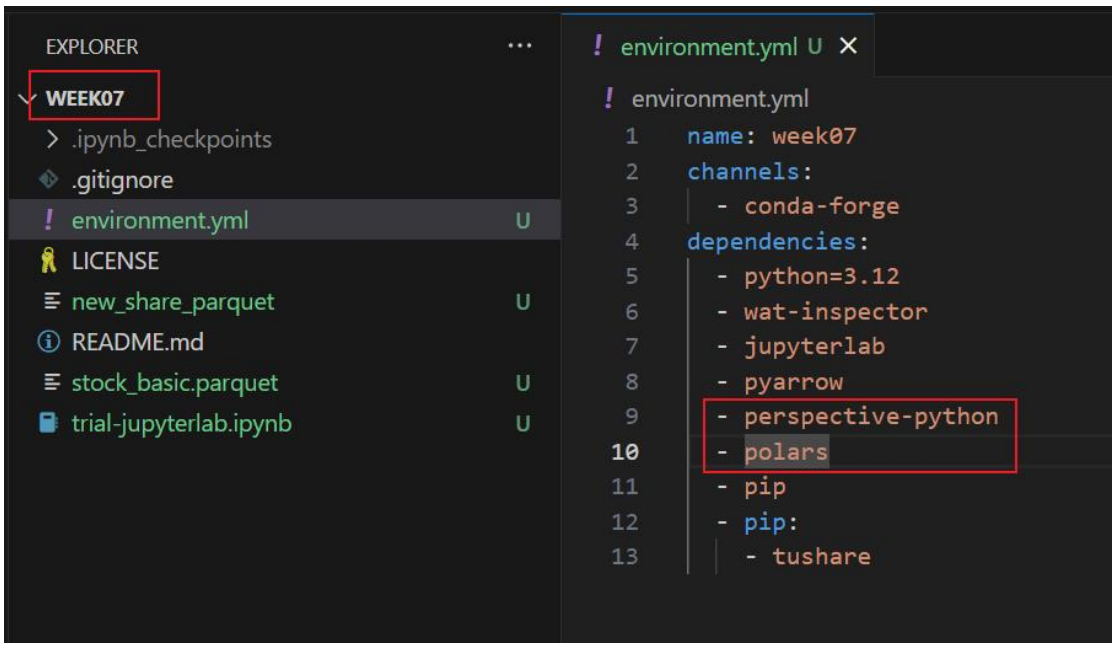

```
In [5]: df.to_parquet("new_share_parquet")

In [6]: pro.stock_basic()
Out[6]:
      ts_code  symbol     name  area industry cnspell market list_date           act_name act_ent_type
0     000001.SZ  000001     平安银行    深圳       银行    payh     主板  19910403              无实际控制人
无
1     000002.SZ  000002      万科A    深圳     全国地产     wka     主板  19910129  深圳市人民政府国有资产监督管理委员会
        地方国企
2     000004.SZ  000004     国华网安    深圳     软件服务    ghwa     主板  19910114                李映彤          民营
企业
3     000006.SZ  000006     深振业A    深圳     区域地产    szya     主板  19920427  深圳市人民政府国有资产监督管理委员
会         地方国企
4     000007.SZ  000007      全新好    深圳     其他商业     qxh     主板  19920413                王玩虹          民营
企业
...         ...     ...      ...   ...      ...     ...     ...       ...                 ...           ...
5409  920111.BJ  920111     聚星科技  None     None    jxkj    北交所  20241111                None          None
5410  920116.BJ  920116     星图测控  None     None    xtck    北交所  20250102                None          None
5411  920118.BJ  920118     太湖远大  None     None    thyd    北交所  20240822                None          None
5412  920128.BJ  920128     胜业电气  None     None    sydq    北交所  20241129                None          None
5413  689009.SH  689009  九号公司-WD    北京       摩托车    jhgs    科创板  20201029                None          None

[5414 rows x 10 columns]
```

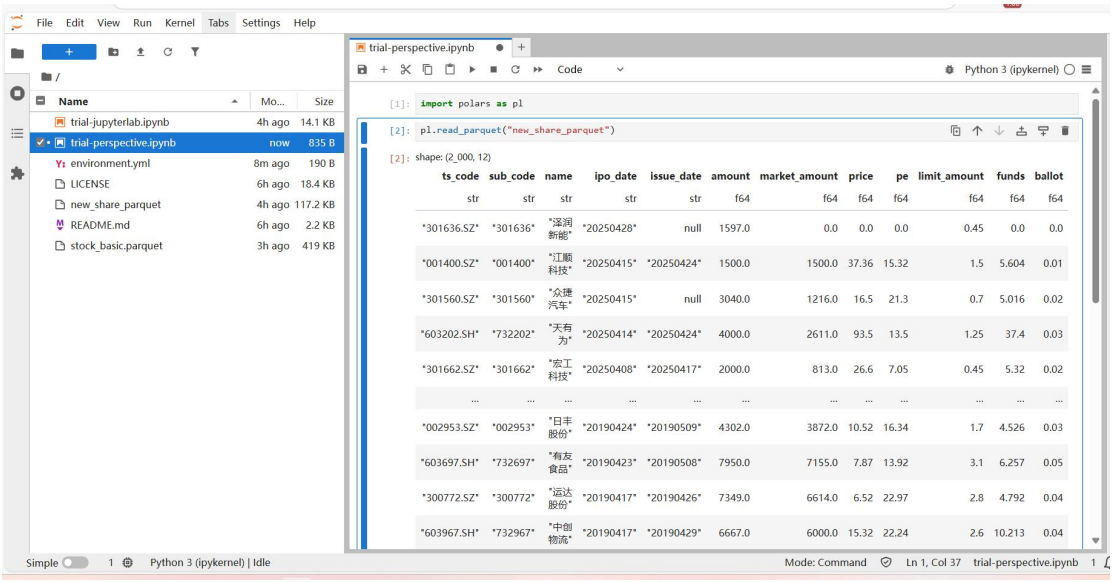
```
In [7]: df = pro.stock_basic()

In [8]: df.columns
Out[8]:
Index(['ts_code', 'symbol', 'name', 'area', 'industry', 'cnspell', 'market',
       'list_date', 'act_name', 'act_ent_type'],
      dtype='object')

In [9]: df = pro.stock_basic(fields="ts_code,symbol,name,area,industry,fullname,enname,cnspell,market,exchange,curr_typ
        e,list_status,list_date,delist_date,is_hs,act_name,act_ent_type")

In [10]: df.shape
Out[10]: (5414, 17)

In [11]:
```

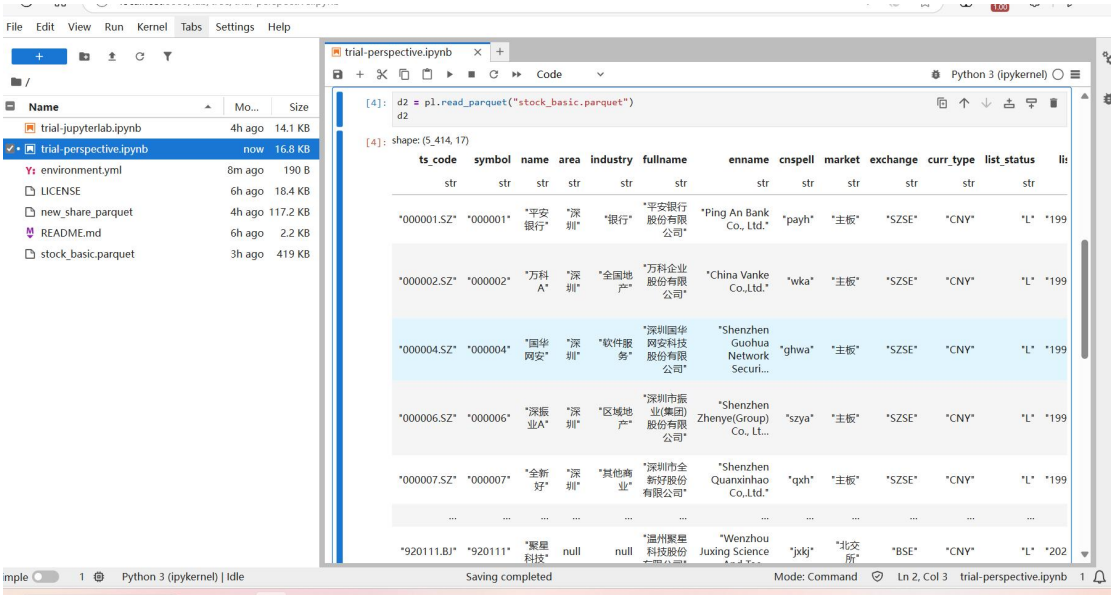
```
In [11]: df
Out[11]:
      ts_code  symbol     name  area industry  ... list_date delist_date is_hs           act_name act_ent_type
0     000001.SZ  000001     平安银行    深圳       银行  ...  19910403        None     S              无实际控制人
无
1     000002.SZ  000002      万科A    深圳     全国地产  ...  19910129        None     S  深圳市人民政府国有资产监督管理
委员会          地方国企
2     000004.SZ  000004     国华网安    深圳     软件服务  ...  19910114        None     N                李映彤
  民营企业
3     000006.SZ  000006     深振业A    深圳     区域地产  ...  19920427        None     S  深圳市人民政府国有资产监督管
理委员会          地方国企
4     000007.SZ  000007      全新好    深圳     其他商业  ...  19920413        None     N                王玩虹
 民营企业
...         ...     ...      ...   ...      ...  ...       ...         ...   ...                 ...          ...
5409  920111.BJ  920111     聚星科技  None     None  ...  20241111        None     N                None         None
5410  920116.BJ  920116     星图测控  None     None  ...  20250102        None     N                None         None
5411  920118.BJ  920118     太湖远大  None     None  ...  20240822        None     N                None         None
5412  920128.BJ  920128     胜业电气  None     None  ...  20241129        None     N                None         None
5413  689009.SH  689009  九号公司-WD    北京       摩托车  ...  20201029        None  None                None         No
ne

[5414 rows x 17 columns]

In [12]: df.to_parquet("stock_basic.parquet")

In [13]:
```



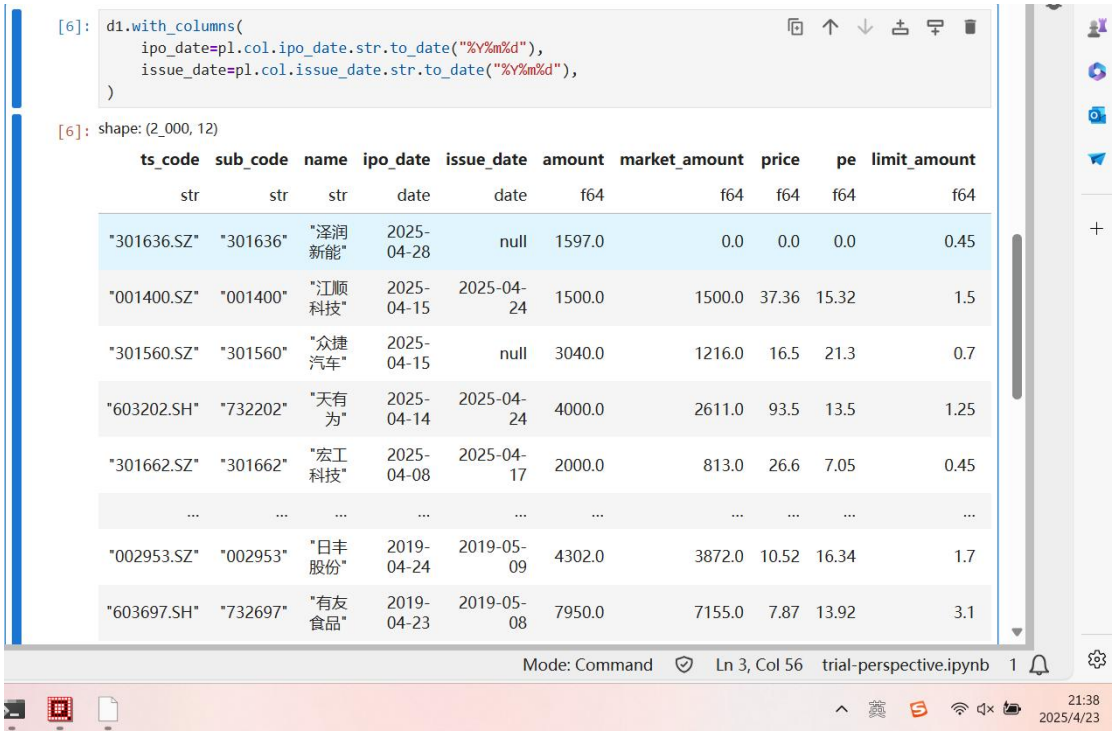
6.通过 perspective-python 软件包查看 polars.DataFrame 数据，实践交互式可视化




File Edit View Run Kernel Tabs Settings Help
trial-perspective.ipynb
Code
Python 3 (ipykernel)
Name
trial-jupyterlab.ipynb 4h ago 14.1 KB
trial-perspective.ipynb now 835 B
environment.yml 8m ago 190 B
LICENSE 6h ago 18.4 KB
new_share_parquet 4h ago 117.2 KB
README.md 6h ago 2.2 KB
stock_basic.parquet 3h ago 419 KB
[1]: import polars as pl
[2]: pl.read_parquet("new_share_parquet")
[2]: shape: (2_000, 12)
ts_code sub_code name ipo_date issue_date amount market_amount price pe limit_amount funds ballot
"301636.SZ" "301636" "深润新能" "20250428" null 1597.0 0.0 0.0 0.0 0.45 0.0 0.0
"001400.SZ" "001400" "江顺科技" "20250415" "20250424" 1500.0 1500.0 37.36 15.32 1.5 5.604 0.01
"301560.SZ" "301560" "众捷汽车" "20250415" null 3040.0 1216.0 16.5 21.3 0.7 5.016 0.02
"603202.SH" "732202" "天有为" "20250414" "20250424" 4000.0 2611.0 93.5 13.5 1.25 37.4 0.03
"301662.SZ" "301662" "宏工科技" "20250408" "20250417" 2000.0 813.0 26.6 7.05 0.45 5.32 0.02
"002953.SZ" "002953" "日丰股份" "20190424" "20190509" 4302.0 3872.0 10.52 16.34 1.7 4.526 0.03
"603697.SH" "732697" "有友食品" "20190423" "20190508" 7950.0 7155.0 7.87 13.92 3.1 6.257 0.05
"300772.SZ" "300772" "运达股份" "20190417" "20190426" 7349.0 6614.0 6.52 22.97 2.8 4.792 0.04
"603967.SH" "732967" "中创物流" "20190417" "20190429" 6667.0 6000.0 15.32 22.24 2.6 10.213 0.04
Simple 1 Python 3 (ipykernel) | Idle
Mode: Command Ln 1, Col 37 trial-perspective.ipynb 1


File Edit View Run Kernel Tabs Settings Help
trial-perspective.ipynb
Code
Python 3 (ipykernel)
Name
trial-jupyterlab.ipynb 4h ago 14.1 KB
trial-perspective.ipynb now 16.8 KB
environment.yml 8m ago 190 B
LICENSE 6h ago 18.4 KB
new_share_parquet 4h ago 117.2 KB
README.md 6h ago 2.2 KB
stock_basic.parquet 3h ago 419 KB
[4]: d2 = pl.read_parquet("stock_basic.parquet")
d2
[4]: shape: (5_414, 17)
ts_code symbol name area industry fullname enname cnspell market exchange curr_type list_status
"000001.SZ" "000001" "平安银行" "深圳" "银行" "平安银行股份有限公司" "Ping An Bank Co., Ltd." "payh" "主板" "SZSE" "CNY" "L" "199
"000002.SZ" "000002" "万科A" "深圳" "全国地产" "万科企业股份有限公司" "China Vanke Co.,Ltd." "wka" "主板" "SZSE" "CNY" "L" "199
"000004.SZ" "000004" "国华网安" "深圳" "软件服务" "深圳国华网安科技股份有限公司" "Shenzhen Guohua Network Securi..." "ghwa" "主板" "SZSE" "CNY" "L" "199
"000006.SZ" "000006" "深振业A" "深圳" "区域地产" "深圳市振业(集团)股份有限公司" "Shenzhen Zhenye(Group) Co., Lt..." "szya" "主板" "SZSE" "CNY" "L" "199
"000007.SZ" "000007" "全新好" "深圳" "其他商业" "深圳市全新好股份有限公司" "Shenzhen Quanxinhao Co.,Ltd." "qxh" "主板" "SZSE" "CNY" "L" "199
"920111.BJ" "920111" "聚星科技" null null "温州聚星科技股份" "Wenzhou Juxing Science" "jxkj" "北交所" "BSE" "CNY" "L" "202
Python 3 (ipykernel) | Idle
Saving completed
Mode: Command Ln 2, Col 3 trial-perspective.ipynb 1


[10]: d2
[10]: shape: (5_414, 17)
ts_code symbol name area industry fullname enname cnspell market exchange curr_ty
"000001.SZ" "000001" "平安银行" "深圳" "银行" "平安银行股份有限公司" "Ping An Bank Co., Ltd." "payh" "主板" "SZSE" "CN
"000002.SZ" "000002" "万科A" "深圳" "全国地产" "万科企业股份有限公司" "China Vanke Co.,Ltd." "wka" "主板" "SZSE" "CN
"000004.SZ" "000004" "国华网安" "深圳" "软件服务" "深圳国华网安科技股份有限公司" "Shenzhen Guohua Network Securi..." "ghwa" "主板" "SZSE" "CN
"000006.SZ" "000006" "深振业A" "深圳" "区域地产" "深圳市振业(集团)股份有限" "Shenzhen Zhenye(Group)" "szya" "主板" "SZSE" "CN
Saving started
Mode: Command Ln 1, Col 3 trial-perspective.ipynb 1



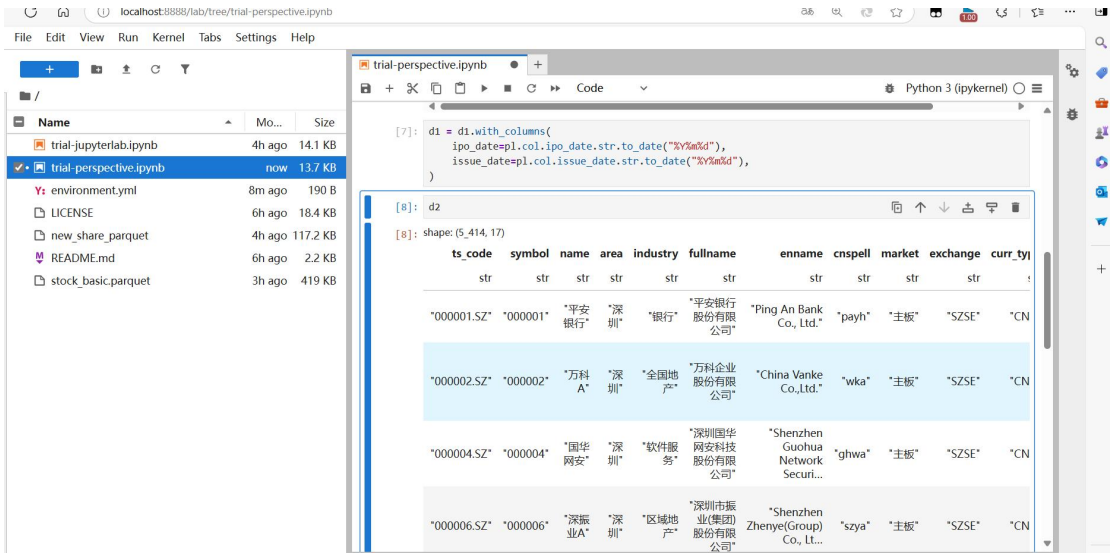
[6]:
```
d1.with_columns(
    ipo_date=pl.col.ipo_date.str.to_date("%Y%m%d"),
    issue_date=pl.col.issue_date.str.to_date("%Y%m%d"),
)
```

[6]: shape: (2_000, 12)

ts_code	sub_code	name	ipo_date	issue_date	amount	market_amount	price	pe	limit_amount
str	str	str	date	date	f64	f64	f64	f64	f64
"301636.SZ"	"301636"	"泽润新能"	2025-04-28	null	1597.0	0.0	0.0	0.0	0.45
"001400.SZ"	"001400"	"江顺科技"	2025-04-15	2025-04-24	1500.0	1500.0	37.36	15.32	1.5
"301560.SZ"	"301560"	"众捷汽车"	2025-04-15	null	3040.0	1216.0	16.5	21.3	0.7
"603202.SH"	"732202"	"天有为"	2025-04-14	2025-04-24	4000.0	2611.0	93.5	13.5	1.25
"301662.SZ"	"301662"	"宏工科技"	2025-04-08	2025-04-17	2000.0	813.0	26.6	7.05	0.45
…	…	…	…	…	…	…	…	…	…
"002953.SZ"	"002953"	"日丰股份"	2019-04-24	2019-05-09	4302.0	3872.0	10.52	16.34	1.7
"603697.SH"	"732697"	"有友食品"	2019-04-23	2019-05-08	7950.0	7155.0	7.87	13.92	3.1

Mode: Command Ln 3, Col 56 trial-perspective.ipynb 1

21:38
2025/4/23



localhost:8888/lab/tree/trial-perspective.ipynb

File Edit View Run Kernel Tabs Settings Help

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Name	Mo...	Size
trial-jupyterlab.ipynb	4h ago	14.1 KB
trial-perspective.ipynb	now	13.7 KB
environment.yml	8m ago	190 B
LICENSE	6h ago	18.4 KB
new_share_parquet	4h ago	117.2 KB
README.md	6h ago	2.2 KB
stock_basic.parquet	3h ago	419 KB

trial-perspective.ipynb

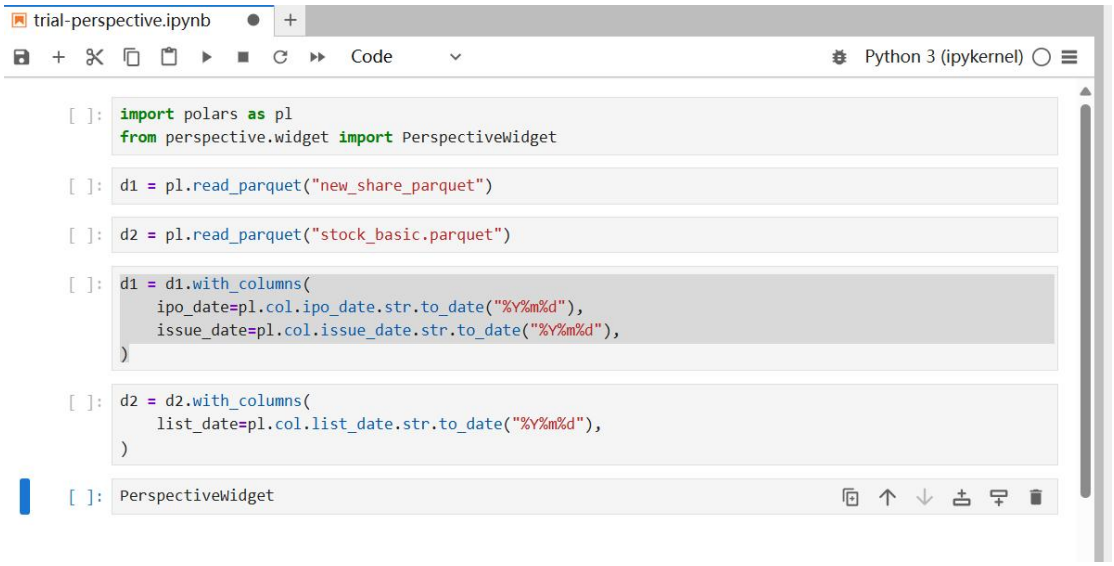
Code Python 3 (ipykernel)

[7]:
```
d1 = d1.with_columns(
    ipo_date=pl.col.ipo_date.str.to_date("%Y%m%d"),
    issue_date=pl.col.issue_date.str.to_date("%Y%m%d"),
)
```

[8]:
```
d2
```

[8]: shape: (5_414, 17)

ts_code	symbol	name	area	industry	fullname	enname	cnspell	market	exchange	curr_ty
str	str	str	str	str	str	str	str	str	str	
"000001.SZ"	"000001"	"平安银行"	"深圳"	"银行"	"平安银行股份有限公司"	"Ping An Bank Co., Ltd."	"payh"	"主板"	"SZSE"	"CN
"000002.SZ"	"000002"	"万科A"	"深圳"	"全国地产"	"万科企业股份有限公司"	"China Vanke Co.,Ltd."	"wka"	"主板"	"SZSE"	"CN
"000004.SZ"	"000004"	"国华网安"	"深圳"	"软件服务"	"深圳国华网安科技股份有限公司"	"Shenzhen Guohua Network Securi..."	"ghwa"	"主板"	"SZSE"	"CN
"000006.SZ"	"000006"	"深振业A"	"深圳"	"区域地产"	"深圳市振业(集团)股份有限公司"	"Shenzhen Zhenye(Group) Co., Lt..."	"szya"	"主板"	"SZSE"	"CN


trial-perspective.ipynb
Code
Python 3 (ipykernel)
[ ]:
import polars as pl
from perspective.widget import PerspectiveWidget
[ ]:
d1 = pl.read_parquet("new_share_parquet")
[ ]:
d2 = pl.read_parquet("stock_basic.parquet")
[ ]:
d1 = d1.with_columns(
ipo_date=pl.col.ipo_date.str.to_date("%Y%m%d"),
issue_date=pl.col.issue_date.str.to_date("%Y%m%d"),
)
[ ]:
d2 = d2.with_columns(
list_date=pl.col.list_date.str.to_date("%Y%m%d"),
)
[ ]:
PerspectiveWidget