1.使用 conda info 命令查看本机 Conda 的配置信息

```
$ conda info

     active environment : base
    active env location : D:\Anaconda
            shell level : 1
       user config file : C:\Users\Lenovo\.condarc
 populated config files : D:\Anaconda\.condarc
          conda version : 24.9.2
    conda-build version : 24.9.0
         python version : 3.12.7.final.0
                 solver : libmamba (default)
       virtual packages : __archspec=1=x86_64_v3
                          __conda=24.9.2=0
                          __win=0=0
       base environment : D:\Anaconda  (writable)
      conda av data dir : D:\Anaconda\etc\conda
  conda av metadata url : None
           channel URLs : https://repo.anaconda.com/pkgs/main/win-64
                          https://repo.anaconda.com/pkgs/main/noarch
                          https://repo.anaconda.com/pkgs/r/win-64
                          https://repo.anaconda.com/pkgs/r/noarch
                          https://repo.anaconda.com/pkgs/msys2/win-64
                          https://repo.anaconda.com/pkgs/msys2/noarch
          package cache : D:\Anaconda\pkgs
                          C:\Users\Lenovo\.conda\pkgs
                          C:\Users\Lenovo\AppData\Local\conda\conda\pkgs
       envs directories : D:\Anaconda\envs
                          C:\Users\Lenovo\.conda\envs
```

```
       envs directories : D:\Anaconda\envs
                          C:\Users\Lenovo\.conda\envs
                          C:\Users\Lenovo\AppData\Local\conda\conda\envs
               platform : win-64
             user-agent : conda/24.9.2 requests/2.32.3 CPython/3.12.7 Windows/11 Windows/10.0.22631 solver/libmamba cond
a-libmamba-solver/24.9.0 libmambapy/1.5.8 aau/0.4.4 c/. s/. e/.
          administrator : False
             netrc file : None
           offline mode : False
```

2. 使用 conda env list 命令查看已有的 Conda 环境的名称和路径，理解 Conda 环境的概念

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda env list
# conda environments:
#
base                  *  D:\Anaconda

(base)
```

3. 使用 conda create 命令创建两个 Conda 环境，一个里面安装 Python 3.12 和 requests 软件包，另一个里面安装 Python 3.9、pandas 和 statsmodels 软件包，能够在终端里切换 Conda 环境，验证 Python 和软件包的版本

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda create -n prj1 python=3.12 requests
Channels:
 - defaults
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: D:\Anaconda\envs\prj1

  added / updated specs:
    - python=3.12
    - requests


The following packages will be downloaded:

    package                    |              build
    ---------------------------|-----------------
    brotli-python-1.0.9        |    py312h5da7b33_9        347 KB
    bzip2-1.0.8                |        h2bbff1b_6         90 KB
    ca-certificates-2025.2.25  |        haa95532_0        130 KB
    certifi-2025.1.31          |    py312haa95532_0        164 KB
    charset-normalizer-3.3.2   |        pyhd3eb1b0_0         44 KB
    expat-2.6.4                |        h8ddb27b_0        257 KB
    idna-3.7                   |    py312haa95532_0        133 KB
```

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda create -n prj2 python=3.9 pandas statsmodels
Channels:
 - defaults
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: D:\Anaconda\envs\prj2

  added / updated specs:
    - pandas
    - python=3.9
    - statsmodels


The following packages will be downloaded:

    package                    |              build
    ---------------------------|-----------------
    blas-1.0                   |              mkl           6 KB
    bottleneck-1.4.2           |      py39hc99e966_0       129 KB
    icc_rt-2022.1.0            |         h6049295_2       6.5 MB
    intel-openmp-2023.1.0      |      h59b6b97_46320       2.7 MB
    mkl-2023.1.0               |      h6b88ed4_46358     155.9 MB
    mkl-service-2.4.0          |      py39h827c3e9_2        66 KB
    mkl_fft-1.3.11             |      py39h827c3e9_0       167 KB
    mkl_random-1_2_8           |      py39hc6IJd2fc_0      257 KB
```

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda env list
# conda environments:
#
base                   *   D:\Anaconda
prj1                       D:\Anaconda\envs\prj1
prj2                       D:\Anaconda\envs\prj2

(base)
```

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda activate prj1
(prj1)
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ which python
/d/Anaconda/envs/prj1/python
(prj1)
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ python --version
Python 3.12.9
(prj1)
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ python
Python 3.12.9 | packaged by Anaconda, Inc. | (main, Feb  6 2025, 18:49:16) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import requests
>>> requests
<module 'requests' from 'D:\\Anaconda\\envs\\prj1\\Lib\\site-packages\\requests\\__init__.py'>
>>> requests.__file__
'D:\\Anaconda\\envs\\prj1\\Lib\\site-packages\\requests\\__init__.py'
>>> quit
Use quit() or Ctrl-Z plus Return to exit
>>> quit()
(prj1)
```

```
$ conda activate prj2
(prj2)
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ which python
/d/Anaconda/envs/prj2/python
(prj2)
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ python --version
Python 3.9.21
(prj2)
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ python
Python 3.9.21 (main, Dec 11 2024, 16:35:24) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import requests
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
ModuleNotFoundError: No module named 'requests'
>>> import pandas
>>> pandas.
  File "<stdin>", line 1
    pandas.
           ^
SyntaxError: invalid syntax
>>> pandas.__file__
'D:\\Anaconda\\envs\\prj2\\lib\\site-packages\\pandas\\__init__.py'
>>> pandas.__verion__
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
AttributeError: module 'pandas' has no attribute '__verion__'
```

4. 使用 conda list 命令显示 Conda 环境里的软件包列表及其版本信息

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda list
# packages in environment at D:\Anaconda\envs\prj2:
#
# Name                    Version                   Build  Channel
blas                      1.0                         mkl
bottleneck                1.4.2           py39hc99e966_0
ca-certificates           2025.2.25           haa95532_0
icc_rt                    2022.1.0            h6049295_2
intel-openmp              2023.1.0         h59b6b97_46320
mkl                       2023.1.0         h6b88ed4_46358
mkl-service               2.4.0           py39h827c3e9_2
mkl_fft                   1.3.11          py39h827c3e9_0
mkl_random                1.2.8           py39hc64d2fc_0
numexpr                   2.10.1          py39h4cd664f_0
numpy                     2.0.2           py39h055cbcc_0
numpy-base                2.0.2           py39h65a83cf_0
openssl                   3.0.16              h3f729d1_0
packaging                 24.2            py39haa95532_0
pandas                    2.2.3           py39h5da7b33_0
patsy                     1.0.1           py39haa95532_0
pip                       25.0            py39haa95532_0
pybind11-abi              5                   hd3eb1b0_0
python                    3.9.21              h8205438_1
python-dateutil           2.9.0post0      py39haa95532_2
python-tzdata             2023.3              pyhd3eb1b0_0
pytz                      2024.1          py39haa95532_0
scipy                     1.13.1          py39h8640f81_1
```

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda activate prj1
(prj1)
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda list
# packages in environment at D:\Anaconda\envs\prj1:
#
# Name                    Version                   Build  Channel
brotli-python             1.0.9           py312h5da7b33_9
bzip2                     1.0.8               h2bbff1b_6
ca-certificates           2025.2.25           haa95532_0
certifi                   2025.1.31       py312haa95532_0
charset-normalizer        3.3.2             pyhd3eb1b0_0
expat                     2.6.4               h8ddb27b_0
idna                      3.7             py312haa95532_0
libffi                    3.4.4               hd77b12b_1
openssl                   3.0.16              h3f729d1_0
pip                       25.0            py312haa95532_0
pysocks                   1.7.1           py312haa95532_0
python                    3.12.9              h14ffc60_0
requests                  2.32.3          py312haa95532_1
setuptools                75.8.0          py312haa95532_0
sqlite                    3.45.3              h2bbff1b_0
tk                        8.6.14              h0416ee5_0
tzdata                    2025a               h04d1e81_0
urllib3                   2.3.0           py312haa95532_0
vc                        14.42               haa95532_4
vs2015_runtime            14.42.34433         he0abc0d_4
wheel                     0.45.1          py312haa95532_0
```

5. 使用 conda install 命令往 Conda 环境里安装更多的软件包，并验证版本

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda install ipython
Channels:
 - defaults
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: D:\Anaconda\envs\prj1

  added / updated specs:
    - ipython


The following packages will be downloaded:

    package                    |            build
    ---------------------------|-----------------
    asttokens-2.0.5            |       pyhd3eb1b0_0          20 B
    colorama-0.4.6             |    py312haa95532_0          53 B
    decorator-5.1.1            |       pyhd3eb1b0_0          12 B
    executing-0.8.3            |       pyhd3eb1b0_0          18 B
    ipython-8.30.0             |    py312haa95532_0         1.5 B
    jedi-0.19.2                |    py312haa95532_0         1.2 B
    matplotlib-inline-0.1.6    |    py312haa95532_0          19 B
    parso-0.8.4                |    py312haa95532_0         239 B
    prompt-toolkit-3.0.43      |    py312haa95532_0         733 B
    prompt_toolkit-3.0.43      |         hd3eb1b0_0           5 B
```

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda list
# packages in environment at D:\Anaconda\envs\prj1:
#
# Name                    Version                   Build  Channel
asttokens                 2.0.5              pyhd3eb1b0_0
brotli-python             1.0.9           py312h5da7b33_9
bzip2                     1.0.8                h2bbff1b_6
ca-certificates           2025.2.25            haa95532_0
certifi                   2025.1.31       py312haa95532_0
charset-normalizer        3.3.2              pyhd3eb1b0_0
colorama                  0.4.6           py312haa95532_0
decorator                 5.1.1              pyhd3eb1b0_0
executing                 0.8.3              pyhd3eb1b0_0
expat                     2.6.4                h8ddb27b_0
idna                      3.7             py312haa95532_0
ipython                   8.30.0          py312haa95532_0
jedi                      0.19.2          py312haa95532_0
libffi                    3.4.4                hd77b12b_1
matplotlib-inline         0.1.6           py312haa95532_0
openssl                   3.0.16               h3f729d1_0
```

6. 使用 pip install 命令往 Conda 环境里安装 Python 软件包，并验证版本

根据 文档 配置 PyPI 清华镜像，加快 pip install 安装软件包的速度

```
                            0.1110                    pj01enaa00002_0      neeps.//repo.anaconaa.com/pkgs/main
tushare                     1.4.19                    pypi_0           pypi
typing-extensions           4.12.2                    pypi_0           pypi
tzdata                      2025.1                    pypi_0           pypi
ucrt                        10.0.22621.0              h57928b3_1       conda-forge
urllib3                     2.3.0                     py312haa95532_0  https://repo.anaconda.com/pkgs/main
vc                          14.42                     haa95532_4       https://repo.anaconda.com/pkgs/main
vc14_runtime                14.42.34438               hfd919c2_24      conda-forge
vs2015_runtime              14.42.34438               h7142326_24      conda-forge
wcwidth                     0.2.5                     pyhd3eb1b0_0     https://repo.anaconda.com/pkgs/main
websocket-client            1.8.0                     pypi_0           pypi
wheel                       0.45.1                    py312haa95532_0  https://repo.anaconda.com/pkgs/main
win_inet_pton               1.1.0                     py312haa95532_0  https://repo.anaconda.com/pkgs/main
xz                          5.6.4                     h4754444_1       https://repo.anaconda.com/pkgs/main
zlib                        1.3.1                     h2466b09_2       conda-forge
(prj1)
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ python
Python 3.12.9 | packaged by conda-forge | (main, Mar  4 2025, 22:37:18) [MSC v.1943 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import tushare
>>> tushare.__version__
'1.4.19'
>>>
```

7. 能够导出 environment.yml Conda 环境配置文件，能够删除 Conda 环境，能够用 environment.yml 配置文件重建 Conda 环境

导出

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda env export
name: prj1
channels:
  - conda-forge
  - defaults
  - https://repo.anaconda.com/pkgs/main
  - https://repo.anaconda.com/pkgs/r
  - https://repo.anaconda.com/pkgs/msys2
dependencies:
  - asttokens=2.0.5=pyhd3eb1b0_0
  - brotli-python=1.0.9=py312h5da7b33_9
  - bzip2=1.0.8=h2bbff1b_6
  - ca-certificates=2025.2.25=haa95532_0
  - certifi=2025.1.31=pyhd8ed1ab_0
  - charset-normalizer=3.3.2=pyhd3eb1b0_0
  - colorama=0.4.6=py312haa95532_0
  - decorator=5.1.1=pyhd3eb1b0_0
  - executing=0.8.3=pyhd3eb1b0_0
  - expat=2.6.4=h8ddb27b_0
  - idna=3.7=py312haa95532_0
  - intel-openmp=2024.2.1=h57928b3_1083
  - ipython=8.30.0=py312haa95532_0
  - jedi=0.19.2=py312haa95532_0
  - libblas=3.9.0=31_h641d27c_mkl
  - libcblas=3.9.0=31_h5e41251_mkl
  - libexpat=2.6.4=he0c23c2_0
  - libffi=3.4.4=hd77b12b_1
  - libhwloc=2.11.2=default_ha69328c_1001
  - libiconv=1.18=h135ad9c_1
```

删除

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda deactivate
(base)
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda env list
# conda environments:
#
base                  *  D:\Anaconda
prj1                     D:\Anaconda\envs\prj1
prj2                     D:\Anaconda\envs\prj2

(base)
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda env remove -n prj1
```

```
Lenovo@LAPTOP-TH3BCRPU MINGW64 ~
$ conda env list
# conda environments:
#
base                  *  D:\Anaconda
prj2                     D:\Anaconda\envs\prj2

(base)
```