

## 1. 配置好 Conda Init,使提示符前能看到 base, 配置启动脚本



```
MINGW64/c/Users/16386 x + v
lrwxrwxrwx 1 16386 197609 55 9月 21 2023 Recent -> /c/Users/16386/AppData/Roaming/Microsoft/Windows/Recent/
drwxr-xr-x 1 16386 197609 0 3月 15 18:12 repo/
-rw-r--r-- 1 16386 197609 6984 3月 15 16:27 report.txt
drwxr-xr-x 1 16386 197609 0 9月 21 2023 'Saved Games'/
drwxr-xr-x 1 16386 197609 0 2月 26 2024 Searches/
lrwxrwxrwx 1 16386 197609 55 9月 21 2023 SendTo -> /c/Users/16386/AppData/Roaming/Microsoft/Windows/SendTo/
lrwxrwxrwx 1 16386 197609 58 9月 21 2023 Templates -> /c/Users/16386/AppData/Roaming/Microsoft/Windows/Template
s/
drwxr-xr-x 1 16386 197609 0 3月 4 2024 Videos/
drwxr-xr-x 1 16386 197609 0 3月 8 15:04 week01/
drwxr-xr-x 1 16386 197609 0 3月 15 18:47 week02/
(base) 16386@  MINGW64 ~
$ code .
node:internal/modules/cjs/loader:1235
  throw err;
  ^

Error: Cannot find module 'C:\Users\16386\anaconda3\Library\c\AppData\Microsoft VS Code\resources\app\out\cli.js'
    at Module._resolveFilename (node:internal/modules/cjs/loader:1232:15)
    at Module._load (node:internal/modules/cjs/loader:1058:27)
    at c._load (node:electron/js2c/node_init:2:16955)
    at Function.executeUserEntryPoint [as runMain] (node:internal/modules/run_main:188:12)
    at node:internal/main/run_main_module:28:49 {
  code: 'MODULE_NOT_FOUND',
  requireStack: []
}

Node.js v20.18.2
(base) 16386@  MINGW64 ~
$
```

```
MINGW64/c/Users/16386 x + v
drwxr-xr-x 1 16386 197609 0 2月 26 2024 Searches/
lrwxrwxrwx 1 16386 197609 55 9月 21 2023 SendTo -> /c/Users/16386/AppData/Roaming/Microsoft/Windows/SendTo/
lrwxrwxrwx 1 16386 197609 58 9月 21 2023 Templates -> /c/Users/16386/AppData/Roaming/Microsoft/Windows/Template
s/
drwxr-xr-x 1 16386 197609 0 3月 4 2024 Videos/
drwxr-xr-x 1 16386 197609 0 3月 8 15:04 week01/
drwxr-xr-x 1 16386 197609 0 3月 15 18:47 week02/
(base) 16386@  MINGW64 ~
$ code .
node:internal/modules/cjs/loader:1235
  throw err;
  ^

Error: Cannot find module 'C:\Users\16386\anaconda3\Library\c\AppData\Microsoft VS Code\resources\app\out\cli.js'
    at Module._resolveFilename (node:internal/modules/cjs/loader:1232:15)
    at Module._load (node:internal/modules/cjs/loader:1058:27)
    at c._load (node:electron/js2c/node_init:2:16955)
    at Function.executeUserEntryPoint [as runMain] (node:internal/modules/run_main:188:12)
    at node:internal/main/run_main_module:28:49 {
  code: 'MODULE_NOT_FOUND',
  requireStack: []
}

Node.js v20.18.2
(base) 16386@  MINGW64 ~
$ echo $PS1
(base) \[\033]0;$TITLEPREFIX:$PWD\007\][\033[32m\]\u@h \[\033[35m\]$MSYSTEM \[\033[33m\]\w\[\033[36m\]`__git_ps1`[\03
3[0m\]\n$
(base) 16386@  MINGW64 ~
```

## 2. conda info 命令: 查看 Conda 的配置信息

```
MINGW64/c/Users/16386 x + v
(base) 16386@  000000 MINGW64 ~
$ conda info

active environment : base
active env location : C:\Users\16386\anaconda3
shell level : 1
user config file : C:\Users\16386\.condarc
populated config files : C:\Users\16386\anaconda3\.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=skylake
                  __conda=24.9.2=0
                  __win=0=0
base environment : C:\Users\16386\anaconda3 (writable)
conda av data dir : C:\Users\16386\anaconda3\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 : C:\Users\16386\anaconda3\pkgs
                 C:\Users\16386\.conda\pkgs
                 C:\Users\16386\AppData\Local\conda\conda\pkgs
envs directories : C:\Users\16386\anaconda3\envs
                  C:\Users\16386\.conda\envs
                  C:\Users\16386\AppData\Local\conda\conda\envs
```

3. conda env list 命令：查看 Conda 环境的名称和路径

```
MINGW64/c/Users/16386 x + v

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 : C:\Users\16386\anaconda3\pkgs
                 C:\Users\16386\.conda\pkgs
                 C:\Users\16386\AppData\Local\conda\conda\pkgs
envs directories : C:\Users\16386\anaconda3\envs
                  C:\Users\16386\.conda\envs
                  C:\Users\16386\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

(base) 16386@  000000 MINGW64 ~
$ conda env list
# conda environments:
#
base                  * C:\Users\16386\anaconda3

(base) 16386@  000000 MINGW64 ~
$
```

4. conda create 命令：创建环境，安装软件，切换环境并验证版本

```
MINGW64/c/Users/16386 x + v
(base) 16386@  000000 MINGW64 ~
$ conda env list
# conda environments:
#
base                  * C:\Users\16386\anaconda3

(base) 16386@  000000 MINGW64 ~
$ conda create -n prj1 python=3.12 requests
Channels:
- defaults
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done

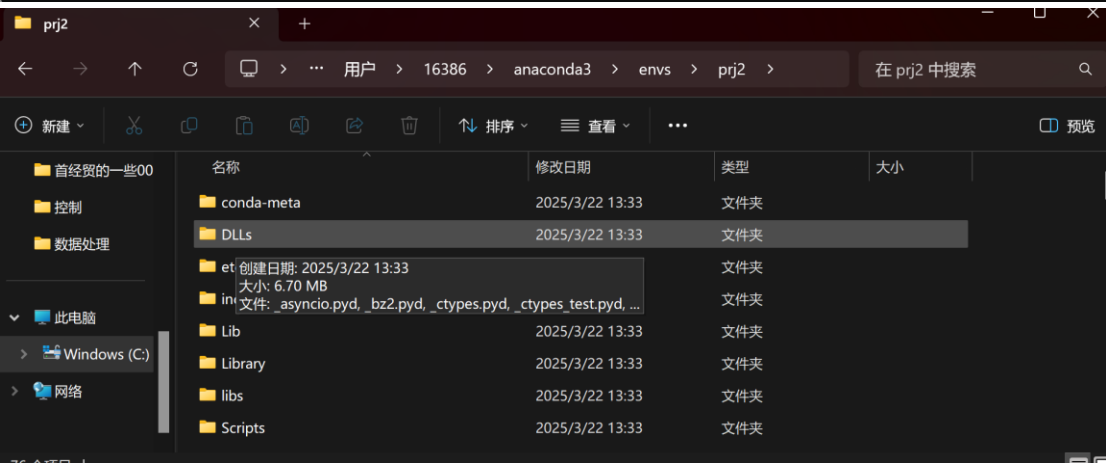
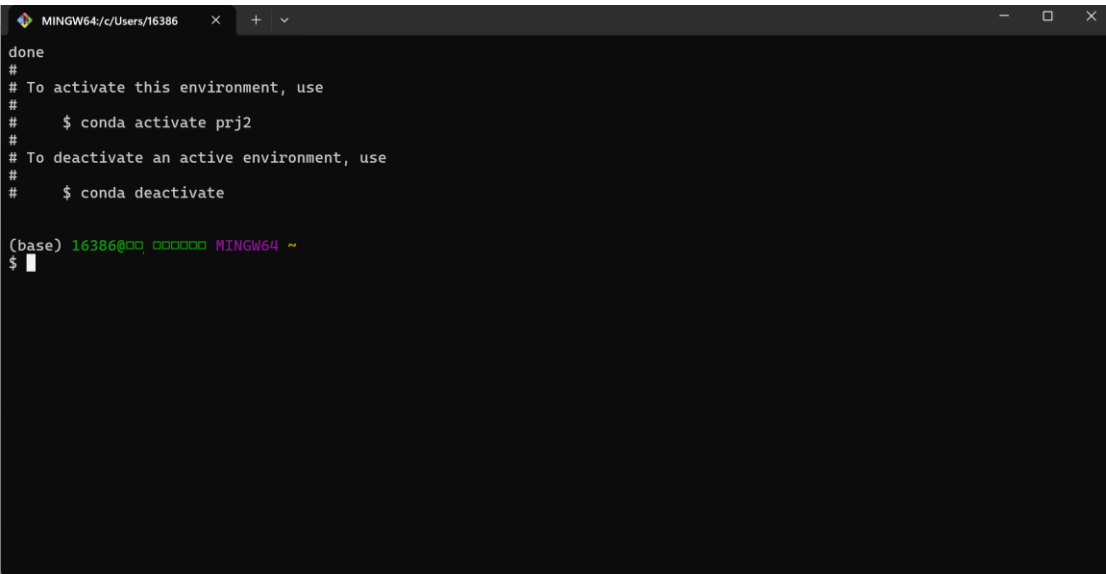
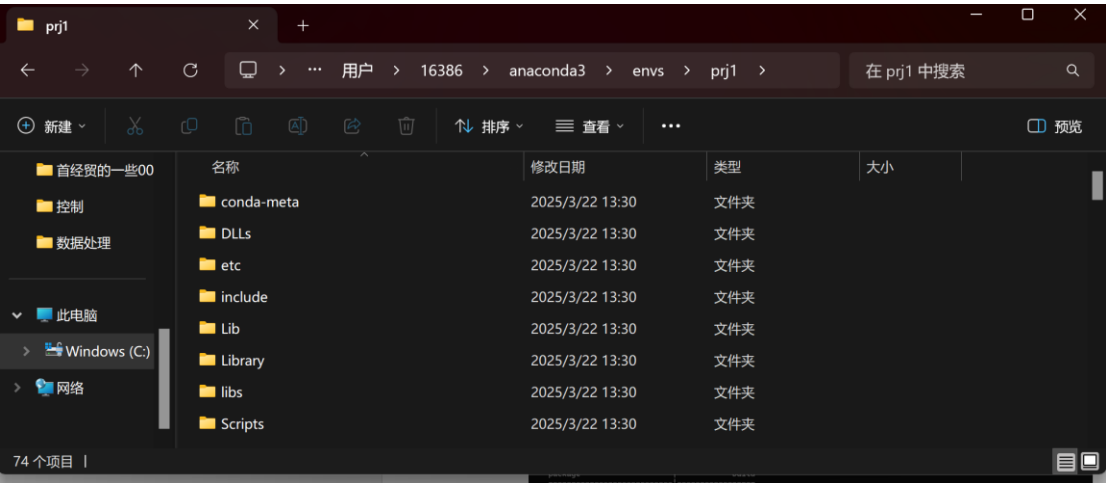
## Package Plan ##

environment location: C:\Users\16386\anaconda3\envs\prj1

added / updated specs:
- python=3.12
- requests

The following packages will be downloaded:

package | build | size
-----|-----|-----
brotli-python-1.0.9 | py312h5da7b33_9 | 347 KB
ca-certificates-2025.2.25 | haa95532_0 | 130 KB
```



```
MINGW64/c/Users/16386 x + v
#
# $ conda activate prj2
#
# To deactivate an active environment, use
#
# $ conda deactivate

(base) 16386@  MINGW64 ~
$ conda env list
# conda environments:
#
base          * C:\Users\16386\anaconda3
prj1          C:\Users\16386\anaconda3\envs\prj1
prj2          C:\Users\16386\anaconda3\envs\prj2

(base) 16386@  MINGW64 ~
$ conda activate prj1
(prj1)
16386@  MINGW64 ~
$ which python
/c/Users/16386/anaconda3/envs/prj1/python
(prj1)
16386@  MINGW64 ~
$ python --version
Python 3.12.9
(prj1)
16386@  MINGW64 ~
$
```

```
MINGW64/c/Users/16386 x + v
-rw-r--r-- 1 16386 197609 524288 1月 18 2024 ntuser-OP1705579858392.dat{a2332f18-cdbf-11ec-8680-002248483d79}.TMCon
tainer00000000000000000002.regtrans-ms
drwxr-xr-x 1 16386 197609 0 3月 22 12:32 OneDrive/
drwxr-xr-x 1 16386 197609 0 2月 19 2024 Pictures/
lrwxrwxrwx 1 16386 197609 66 9月 21 2023 PrintHood -> '/c/Users/16386/AppData/Roaming/Microsoft/Windows/Printer
Shortcuts/'
lrwxrwxrwx 1 16386 197609 55 9月 21 2023 Recent -> /c/Users/16386/AppData/Roaming/Microsoft/Windows/Recent/
drwxr-xr-x 1 16386 197609 0 3月 15 18:12 repo/
-rw-r--r-- 1 16386 197609 6984 3月 15 16:27 report.txt
drwxr-xr-x 1 16386 197609 0 9月 21 2023 'Saved Games/'
drwxr-xr-x 1 16386 197609 0 2月 26 2024 Searches/
lrwxrwxrwx 1 16386 197609 55 9月 21 2023 SendTo -> /c/Users/16386/AppData/Roaming/Microsoft/Windows/SendTo/
lrwxrwxrwx 1 16386 197609 58 9月 21 2023 Templates -> /c/Users/16386/AppData/Roaming/Microsoft/Windows/Template
s/
drwxr-xr-x 1 16386 197609 0 3月 4 2024 Videos/
drwxr-xr-x 1 16386 197609 0 3月 8 15:04 week01/
drwxr-xr-x 1 16386 197609 0 3月 15 18:47 week02/
(prj1)
16386@  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.
>>> ls -l
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
NameError: name 'ls' is not defined
>>> import requests
>>> requests
<module 'requests' from 'C:\\Users\\16386\\anaconda3\\envs\\prj1\\Lib\\site-packages\\requests\\__init__.py'>
>>>
```

```
MINGW64/c/Users/16386 x + v
File "<stdin>", line 1, in <module>
ModuleNotFoundError: No module named 'pandas'
>>> import statsmodels
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
ModuleNotFoundError: No module named 'statsmodels'
>>> quit()
(prj1)
16386@  MINGW64 ~
$ conda activate prj2
(prj2)
16386@  MINGW64 ~
$ which python
/c/Users/16386/anaconda3/envs/prj2/python
(prj2)
16386@  MINGW64 ~
$ python --version
Python 3.9.21
(prj2)
16386@  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 pandas
>>> pandas.__file__
'C:\\Users\\16386\\anaconda3\\envs\\prj2\\Lib\\site-packages\\pandas\\__init__.py'
>>> pandas.__version__
'2.2.3'
>>> import statsmodels
>>> statsmodels.__version__
'0.14.4'
>>> quit()
(prj2)
16386@  MINGW64 ~
$
```

5. conda list 命令：显示软件包列表和版本信息

```
MINGW64/c/Users/16386 x + v
16386@MINGW64 ~
$ conda activate prj1
(prj1)
16386@MINGW64 ~
$ conda list
# packages in environment at C:\Users\16386\anaconda3\envs\prj1:
#
# Name                    Version            Build                Channel
brotli-python            1.0.9              py312h5da7b33_9      h2bbff1b_6
bzip2                    1.0.8              h2bbff1b_6           haa95532_0
ca-certificates           2025.2.25          haa95532_0           py312haa95532_0
certifi                   2025.1.31          py312haa95532_0      pyhd3eb1b0_0
charset-normalizer        3.3.2              pyhd3eb1b0_0          h8ddb27b_0
expat                     2.6.4              h8ddb27b_0            py312haa95532_0
idna                      3.7                h14fffc60_0           hd77b12b_1
libffi                    3.0.4              h3f720d1_0            py312haa95532_0
openssl                   3.0.16             h3f720d1_0            py312haa95532_0
pip                       25.0               py312haa95532_0      py312haa95532_0
pysocks                   1.7.1              py312haa95532_0      h14fffc60_0
python                    3.12.9             h14fffc60_0           py312haa95532_1
requests                  2.32.3             py312haa95532_1      py312haa95532_0
setuptools                75.8.0             py312haa95532_0      h2bbff1b_0
sqlite                    3.45.3             h2bbff1b_0            h0416ee5_0
tk                         8.6.14             h0416ee5_0            h04d1e81_0
tzdata                    2025a              h04d1e81_0            py312haa95532_0
urllib3                   2.3.0              py312haa95532_0      haa95532_4
vc                         14.42              haa95532_4            he8abce6d_4
vs2015_runtime            14.42.34433        he8abce6d_4           py312haa95532_0
wheel                     0.45.1             py312haa95532_0      py312haa95532_0
win_inet_pton             1.1.0              py312haa95532_0      h4754444_1
xz                         5.6.4              h4754444_1            h8cc25b3_1
zlib                      1.2.13             h8cc25b3_1
(prj1)
16386@MINGW64 ~
$
```

6. conda install 命令：安装软件包并验证版本

```
MINGW64/c/Users/16386 x + v
$ conda install ipython
Channels:
 - defaults
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done

## Package Plan ##

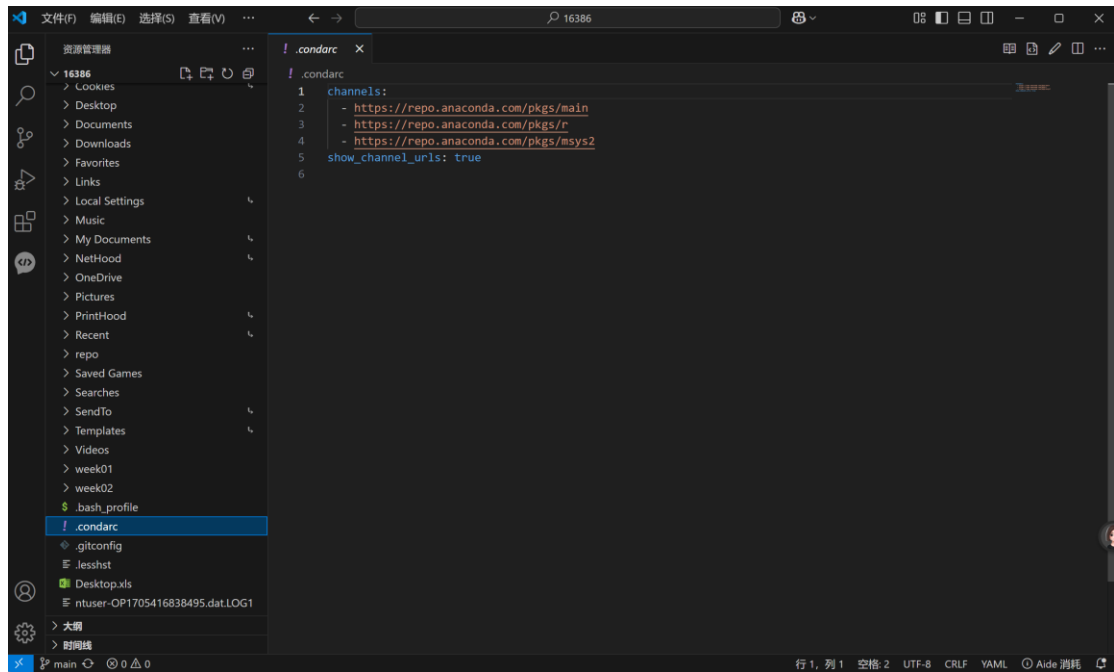
  environment location: C:\Users\16386\anaconda3\envs\prj1

  added / updated specs:
  - ipython

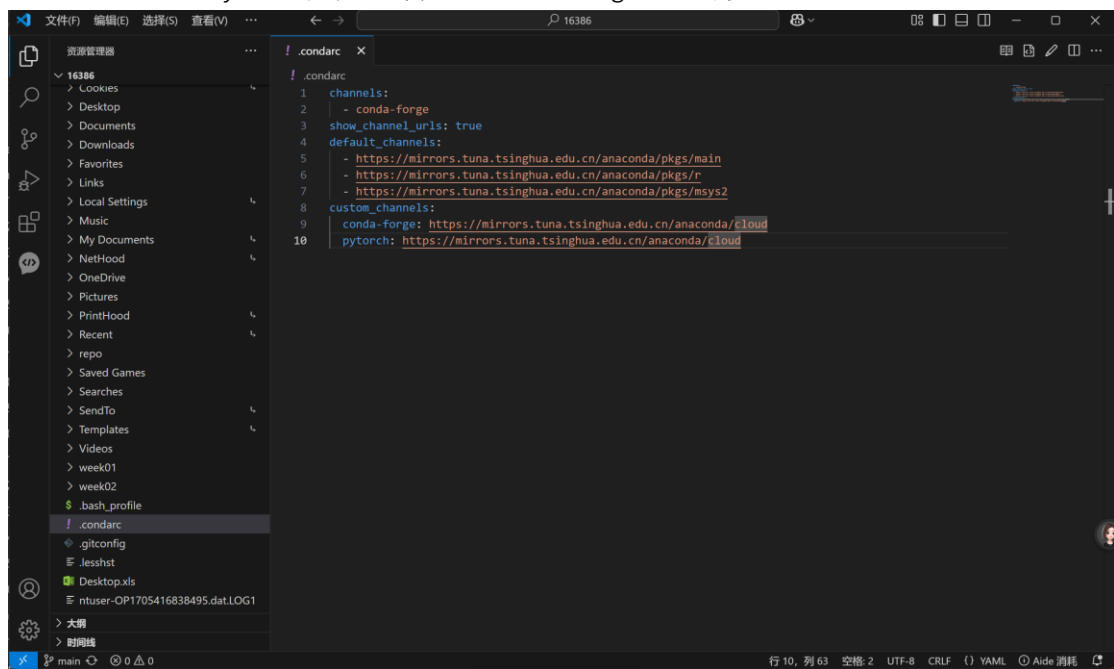
The following packages will be downloaded:

package | build
done
(prj1)
16386@MINGW64 ~
$ conda list
# packages in environment at C:\Users\16386\anaconda3\envs\prj1:
#
# Name                    Version            Build                Channel
asttokens                 2.0.5              pyhd3eb1b0_0          py312h5da7b33_9
brotli-python            1.0.9              h2bbff1b_6           haa95532_0
bzip2                    1.0.8              h2bbff1b_6           haa95532_0
ca-certificates           2025.2.25          haa95532_0           py312haa95532_0
certifi                   2025.1.31          py312haa95532_0      pyhd3eb1b0_0
charset-normalizer        3.3.2              pyhd3eb1b0_0          h8ddb27b_0
colorama                  0.4.6              py312haa95532_0      pyhd3eb1b0_0
decorator                 5.1.1              pyhd3eb1b0_0          pyhd3eb1b0_0
executing                 0.8.3              pyhd3eb1b0_0          h8ddb27b_0
expat                     2.6.4              h8ddb27b_0
```

7. 配置 Anaconda 清华镜像，首先先创建名为 .condarc 的文件



添加 Anaconda Python 免费仓库，将 conda-forge 设置为默认 Channel



安装 polars (defaults channel)

```
MINGW64/c/Users/16386 x + v
(base) 16386@  MINGW64 ~
$ conda activate prj1
(prj1)
16386@  MINGW64 ~
$ conda install polars
Channels:
- 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: failed

PackagesNotNotFoundError: The following packages are not available from current channels:

- polars

Current channels:

- defaults
- https://repo.anaconda.com/pkgs/main
- https://repo.anaconda.com/pkgs/r
- https://repo.anaconda.com/pkgs/msys2

To search for alternate channels that may provide the conda package you're
looking for, navigate to

https://anaconda.org
```

(conda-forge channel)

```
MINGW64/c/Users/16386 x + v
(base) 16386@  MINGW64 ~
$ conda activate prj1
(prj1)
16386@  MINGW64 ~
$ conda install polars
Channels:
- conda-forge
- 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

## Package Plan ##

environment location: C:\Users\16386\anaconda3\envs\prj1

added / updated specs:
- polars

The following packages will be downloaded:

package | build | size | channel
-----|-----|-----|-----
certifi-2025.1.31 | pyhd8ed1ab_0 | 159 KB | conda-forge
intel-openmp-2024.2.1 | h57928b3_1083 | 1.8 MB | conda-forge
libblas-3.9.0 | 31_h641d27c_mkl | 3.6 MB | conda-forge

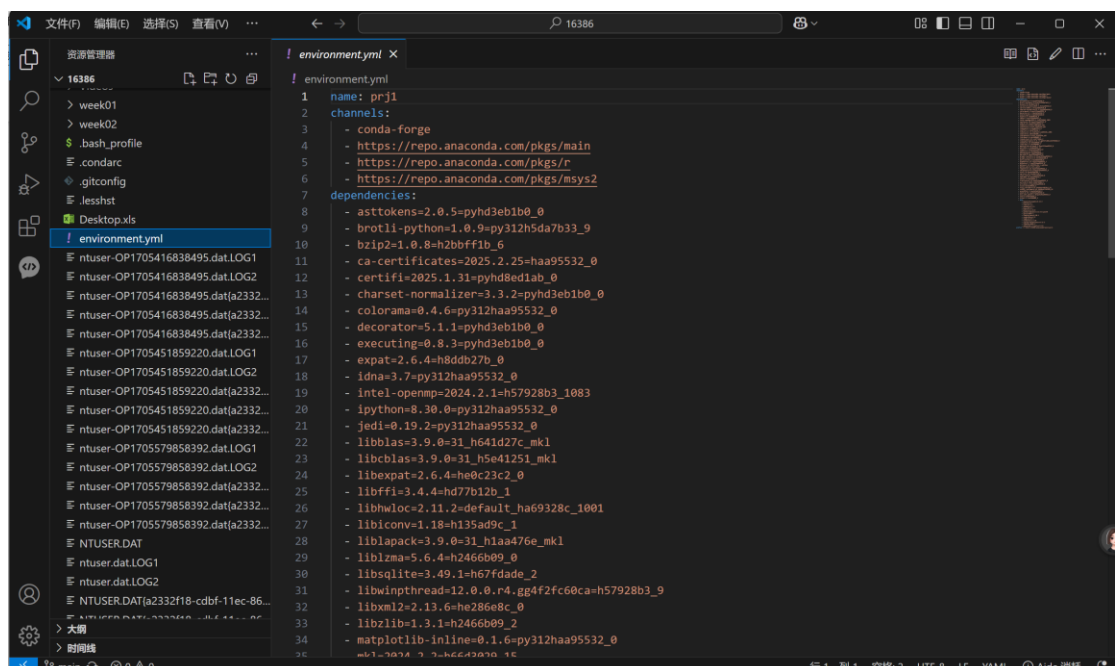
16386@  MINGW64 ~
$ conda activate prj1
(prj1)
16386@  MINGW64 ~
$ python
Python 3.12.9 | packaged by conda-forge | (main, Mar 4 2025, 22:37:18) [MSC v.1943 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import polars
>>> quit()
(prj1)
16386@  MINGW64 ~
$
```

8. pip install 命令安装 python，并配置 PyPI 清华镜像

```
MINGW64/c/Users/16386 x + v
Downloading pytz-2025.1-py2.py3-none-any.whl (507 kB)
Downloading tzdata-2025.1-py2.py3-none-any.whl (346 kB)
Downloading beautifulsoup4-4.13.3-py3-none-any.whl (186 kB)
Downloading soupsieve-2.6-py3-none-any.whl (36 kB)
Downloading typing_extensions-4.12.2-py3-none-any.whl (37 kB)
Installing collected packages: pytz, websocket-client, tzdata, typing-extensions, tqdm, soupsieve, simplejson, python-da
teutil, lxml, pandas, beautifulsoup4, bs4, tushare
Successfully installed beautifulsoup4-4.13.3 bs4-0.0.2 lxml-5.3.1 pandas-2.2.3 python-dateutil-2.9.0.post0 pytz-2025.1 s
implejson-3.20.1 soupsieve-2.6 tqdm-4.67.1 tushare-1.4.19 typing-extensions-4.12.2 tzdata-2025.1 websocket-client-1.8.0
(prj1)
16386@MINGW64 ~
$ python -m pip install --upgrade pip
Requirement already satisfied: pip in c:\users\16386\anaconda3\envs\prj1\lib\site-packages (25.0)
Collecting pip
  Downloading pip-25.0.1-py3-none-any.whl.metadata (3.7 kB)
  Downloading pip-25.0.1-py3-none-any.whl (1.8 MB)
Installing collected packages: pip
  Attempting uninstall: pip
    Found existing installation: pip 25.0
    Uninstalling pip-25.0:
      Successfully uninstalled pip-25.0
Successfully installed pip-25.0.1
(prj1)
16386@MINGW64 ~
$ pip config set global.index-url https://mirrors.tuna.tsinghua.edu.cn/pypi/web/simple
Writing to C:\Users\16386\AppData\Roaming\pip\pip.ini
(prj1)
16386@MINGW64 ~
$
```

## 9. 导出 Conda 环境配置文件

```
16386@MINGW64 ~
$ conda env export
name: prj1
channels:
  - conda-forge
  - 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
  - libcbblas=3.9.0=31_h5e41251_mkl
  - libexpat=2.6.4=he0c23c2_0
  - libffi=3.4.4=hd77b12b_1
  - libhwloc=2.11.2=defaul_ha69328c_1001
  - libiconv=1.18=h135ad9c_1
```



The screenshot shows a code editor with a file explorer on the left and a code editor on the right. The file explorer shows a directory structure with files like .bash\_profile, .condarc, .gitconfig, .lessht, Desktop.xls, and environment.yml. The code editor shows the content of environment.yml, which is the same as the output of the conda env export command in the previous block.



## 删除环境

```
16386@00 000000 MINGW64 ~
$ conda deactivate
(base)
16386@00 000000 MINGW64 ~
$ conda env list
# conda environments:
#
base                  * C:\Users\16386\anaconda3
prj1                  C:\Users\16386\anaconda3\envs\prj1
prj2                  C:\Users\16386\anaconda3\envs\prj2

(base)
16386@00 000000 MINGW64 ~
$ conda env remove -n prj1

Remove all packages in environment C:\Users\16386\anaconda3\envs\prj1:

## Package Plan ##

  environment location: C:\Users\16386\anaconda3\envs\prj1

The following packages will be REMOVED:

  asttokens-2.0.5-pyhd3eb1b0_0
  brotli-python-1.0.9-py312h5da7b33_9
```

## 10. 创建项目

```
MINGW64: C:\Users\16386\ref x + v
(base) 16386@00 000000 MINGW64 ~/repo
$ mkdir myproject

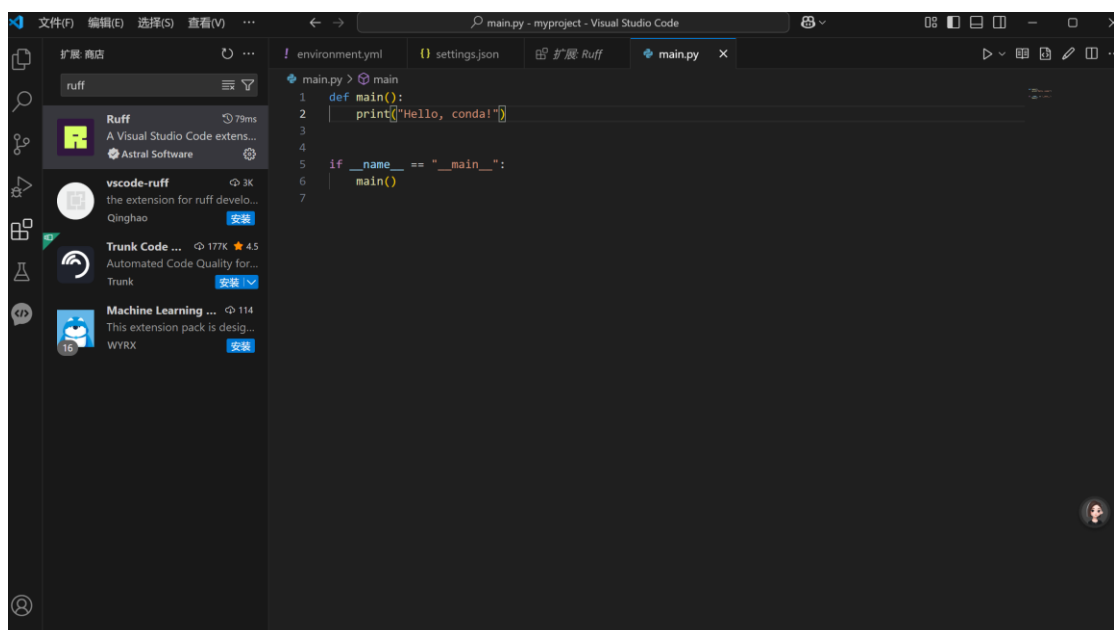
(base) 16386@00 000000 MINGW64 ~/repo
$ ls -l
total 0
drwxr-xr-x 1 16386 197609 0  3月 22 16:20 myproject/
drwxr-xr-x 1 16386 197609 0  3月 15 18:23 mywork/
drwxr-xr-x 1 16386 197609 0  3月 22 15:26 prj1/

(base) 16386@00 000000 MINGW64 ~/repo
$ cat environment.yml
cat: environment.yml: No such file or directory

(base) 16386@00 000000 MINGW64 ~/repo
$ cd myproject/

(base) 16386@00 000000 MINGW64 ~/repo/myproject
$ cat environment.yml
name: my-project
channels:
  - conda-forge
done
#
# To activate this environment, use
#
#     $ conda activate my-project
#
# To deactivate an active environment, use
```

## 编写 main.py 脚本



```
main.py - myproject - Visual Studio Code
environment.yml  settings.json  扩展 Ruff  main.py x
main.py > main
1 def main():
2     print("Hello, conda!")
3
4
5 if __name__ == "__main__":
6     main()
7
```

