

conda info: 命令查看本机 Conda 的配置信息

```
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda info

      active environment : base
      active env location : D:\bianchengruanjian\anaconda
            shell level : 1
      user config file : C:\Users\ZhaoXu\.condarc
populated config files : D:\bianchengruanjian\anaconda\.condarc
                        C:\Users\ZhaoXu\.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
                  __cuda=11.2=0
                  __win=0=0
      base environment : D:\bianchengruanjian\anaconda (writable)
      conda av data dir : D:\bianchengruanjian\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:\bianchengruanjian\anaconda\pkgs
                      C:\Users\ZhaoXu\.conda\pkgs
                      C:\Users\ZhaoXu\AppData\Local\conda\conda\pkgs
      envs directories : D:\bianchengruanjian\anaconda\envs
                        C:\Users\ZhaoXu\.conda\envs
                        C:\Users\ZhaoXu\AppData\Local\conda\conda\envs
```

conda env list: 查看已有的环境名称与路径

```
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda env list
# conda environments:
#
base                  *  D:\bianchengruanjian\anaconda
myenv                 D:\bianchengruanjian\anaconda\envs\myen
v
py312_env             D:\bianchengruanjian\anaconda\envs\py31
2_env
py39_env              D:\bianchengruanjian\anaconda\envs\py39
_env
```

conda create -n prj1 python=3.12 requests :创建 Conda 环境, 里面安装 Python 3.12 和 requests

```
ZhaoXu@LAPTOP-QD2IM9DB 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:\bianchengruanjian\anaconda\envs\prj1
```

conda create -n prj2 python=3.9 pandas statsmodels : 创建 Conda 环境，里面安装 Python 3.9 和 pandas 、 statsmodels 软件包

```
(base)
ZhaoXu@LAPTOP-QD2IM9DB 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:\bianchengruanjian\anaconda\envs\prj2

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

conda env list :

```
(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda env list
# conda environments:
#
base                *  D:\bianchengruanjian\anaconda
myenv               D:\bianchengruanjian\anaconda\envs\myenv
prj1                D:\bianchengruanjian\anaconda\envs\prj1
prj2                D:\bianchengruanjian\anaconda\envs\prj2
```

conda list : 显示 Conda 环境里的软件包列表及其版本信息

```
(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda list
# packages in environment at D:\bianchengruanjian\anaconda:
#
# Name                                Version                                Build                                Channel
_anaconda_depends                     2024.10                               py312_mkl_0                         defaults
aiobotocore                           2.12.3                                py312haa95532_0                     defaults
aiohappyeyeballs                      2.4.0                                  py312haa95532_0                     defaults
aiohttp                                3.10.5                                 py312h827c3e9_0                     defaults
aioitertools                          0.7.1                                  pyhd3eb1b0_0                         defaults
aiosignal                             1.2.0                                  pyhd3eb1b0_0                         defaults
alabaster                             0.7.16                                py312haa95532_0                     defaults
altair                                 5.0.1                                  py312haa95532_0                     defaults
anaconda-anon-usage                   0.4.4                                  py312hfc23b7f_100                   defaults
anaconda-catalogs                     0.2.0                                  py312haa95532_1                     defaults
anaconda-client                       1.12.3                                 py312haa95532_0                     defaults
anaconda-cloud-auth                   0.5.1                                  py312haa95532_0                     defaults
anaconda-navigator                    2.6.3                                  py312haa95532_0                     defaults
anaconda-project                      0.11.1                                 py312haa95532_0                     defaults
anaconda_powershell_prompt            1.1.0                                  haa95532_0                          defaults
anaconda_prompt                       1.1.0                                  haa95532_0                          defaults
annotated-types                       0.6.0                                  py312haa95532_0                     defaults
anyio                                  4.2.0                                  py312haa95532_0                     defaults
```

配置 Anaconda 清华镜像, 加快 conda install 安装软件包的速度, 将 conda-forge 设置为默认 Channel, 让 conda install 能够安装更多的软件包

```
! .condarc X
C:\Users\ZhaoXu\.condarc (preview)
1 channels:
2   - conda-forge
3 show_channel_urls: true
4 default_channels:
5   - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkg/main
6   - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkg/r
7   - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkg/msys2
8 custom_channels:
9   conda-forge: https://mirrors.tuna.tsinghua.edu.cn/anaconda/cloud
10  pytorch: https://mirrors.tuna.tsinghua.edu.cn/anaconda/cloud
11
```

conda install polars: 下载 polars

```
(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda activate prj1
(prj1)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda install polars
Retrieving notices: ...working... done
Channels:
- conda-forge
- https://repo.anaconda.com/pkg/main
- https://repo.anaconda.com/pkg/r
- https://repo.anaconda.com/pkg/msys2
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done

## Package Plan ##

environment location: D:\bianchengruanjian\anaconda\envs\p1

added / updated specs:
- polars

The following packages will be downloaded:

package | build | size
-----|-----|-----
certifi-2025.1.31 | pyhd8ed1ab_0 | 15e
intel-openmp-2024.2.1 | h57928b3_1083 | 1.e
libblas-3.9.0 | 31_h641d27c_mkl | 3.e
libblas-3.9.0 | 31_h5e41251_mkl | 3.e
libexpat-2.6.4 | he0c23c2_0 | 13e
```

pip install tushare: 下载 tushare

```
(prj1)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ pip install tushare
Looking in indexes: https://pypi.tuna.tsinghua.edu.cn/simple
Collecting tushare
  Downloading https://pypi.tuna.tsinghua.edu.cn/packages/38/33/0b4ed09bfb3b69887c2545f1c587420c89685d36c377095e465cc080759b/tushare-1.4.21-py3-none-any.whl (142 kB)
Collecting pandas (from tushare)
  Downloading https://pypi.tuna.tsinghua.edu.cn/packages/29/d4/1244ab8edf173a10fd601f7e13b9566c1b525c4f365d6bee918e68381889/pandas-2.2.3-cp312-cp312-win_amd64.whl (11.5 MB)
Requirement already satisfied: requests in d:\bianchengruanjian\anaconda\envs\prj1\lib\site-packages (from tushare) (2.32.3)
Collecting lxml (from tushare)
  Downloading https://pypi.tuna.tsinghua.edu.cn/packages/2b/9c/8abe21585d20ef70ad9cec7562da4332b764ed69ec29b7389d23dfabcea0/lxml-5.3.1-cp312-cp312-win_amd64.whl (3.8 MB)
Collecting simplejson (from tushare)
  Downloading https://pypi.tuna.tsinghua.edu.cn/packages/bc/5d/4e243e937fa3560107c69f6f7c2eed8589163f5ed14324e864871daa2dd9/simplejson-3.20.1-cp312-cp312-win_amd64.whl (75 kB)
Collecting bs4 (from tushare)
  Downloading https://pypi.tuna.tsinghua.edu.cn/packages/51/bb/bf7aab772a159614954d84aa832c129624ba6c32faa559dfb208a534e50b/bs4-0.0.2-py2.py3-none-any.whl (1.2 kB)
Collecting websocket-client>=0.57.0 (from tushare)
  Downloading https://pypi.tuna.tsinghua.edu.cn/packages/5a/84/44687a29792a70e111c5c477230a72c4b957d88d16141199bf9acb7537a3/websocket_client-1.8.0-py3-none-any.whl (58 kB)
Collecting tqdm (from tushare)
```

conda env export -f environment.yml: 到处 conda 环境, 命名为 environment.yml

```
(prj1)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda env export -f environment.yml
(prj1)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
```

```
! environment.yml X
! environment.yml
1 name: prj1
2 channels:
3   - conda-forge
4   - https://repo.anaconda.com/pkg/main
5   - https://repo.anaconda.com/pkg/r
6   - https://repo.anaconda.com/pkg/msys2
7 dependencies:
8   - brotli-python=1.0.9=py312h5da7b33_9
9   - bzip2=1.0.8=h2bbff1b_6
10  - ca-certificates=2025.2.25=h2b2b2b2_0
11  - certifi=2025.1.31=pyhd8ed1ab_0
12  - charset-normalizer=3.3.2=pyhd3eb1b0_0
13  - expat=2.6.4=h8ddb27b_0
14
15  - xz=5.6.4=h4754444_1
16  - zlib=1.3.1=h2466b09_2
17
18  - pip:
19    - beautifulsoup4==4.13.3
20    - bs4==0.0.2
21    - colorama==0.4.6
22    - lxml==5.3.1
23    - pandas==2.2.3
24    - polars==1.26.0
25    - python-dateutil==2.9.0.post0
26    - pytz==2025.2
27    - simplejson==3.20.1
28    - six==1.17.0
29    - soupsieve==2.6
30    - tqdm==4.67.1
31    - tushare==1.4.21
32    - typing-extensions==4.13.0
33    - tzdata==2025.2
34    - websocket-client==1.8.0
35
36  prefix: D:\bianchengruanjian\anaconda\envs\prj1
```

pip: 后期自己下载的

删除 Conda 环境:

```
(prj1)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda deactivate
(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda env list
# conda environments:
#
base * D:\bianchengruanjian\anaconda
myenv D:\bianchengruanjian\anaconda\envs\m
yenv
prj1 D:\bianchengruanjian\anaconda\envs\p
rj1
prj2 D:\bianchengruanjian\anaconda\envs\p
rj2
py312_env D:\bianchengruanjian\anaconda\envs\p
y312_env
py39_env D:\bianchengruanjian\anaconda\envs\p
y39_env

(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda env remove -n prj1
```

conda deactivate: 先离开 prj1 环境


```

ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ conda env list
# conda environments:
#
base                  * D:\bianchengruanjian\anaconda
myenv                 D:\bianchengruanjian\anaconda\envs\m
yenv
prj2                  D:\bianchengruanjian\anaconda\envs\p
rj2
py312_env             D:\bianchengruanjian\anaconda\envs\p
y312_env
py39_env              D:\bianchengruanjian\anaconda\envs\p
y39_env

```

删除后没有 prj1

配置文件重建 Conda 环境: (将 `environment.yml` 移动到新文件夹内)

```

(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~
$ cd repo
(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~/repo
$ mkdir prj1
(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~/repo
$ cd prj1
(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~/repo/prj1
$ ls -l
total 0
(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~/repo/prj1
$ mv ../environment.yml ./
> ^C
(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~/repo/prj1
$ mv ../environment.yml ./
(base)

```

conda env create: 重建 Conda 环境

```

done
#
# To activate this environment, use
#
#     $ conda activate prj1
#
# To deactivate an active environment, use
#
#     $ conda deactivate

(base)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~/repo/prj1
$ conda env list
# conda environments:
#
base                  * D:\bianchengruanjian\anaconda
myenv                 D:\bianchengruanjian\anaconda\envs\myenv
prj1                  D:\bianchengruanjian\anaconda\envs\prj1
prj2                  D:\bianchengruanjian\anaconda\envs\prj2
py312_env             D:\bianchengruanjian\anaconda\envs\py312_env
py39_env              D:\bianchengruanjian\anaconda\envs\py39_env

```

conda 与 python 关系:

Python 是编程语言，而 Conda 是包管理与环境管理工具（可管理 Python 及其他语言的依赖）。

Conda 通过 Anaconda/Miniconda 发行版提供，默认安装 Python 并支持多版本切换。

Conda 能安装 Python 包（如 numpy）并隔离不同项目的依赖环境（避免版本冲突）。

Conda 与 Conda-Forge 关系:

Conda 是包和环境管理工具（Anaconda/Miniconda 自带的核心工具）。

Conda-Forge 是一个社区维护的 Conda 软件包仓库，提供更全、更新的开源包（如 numpy、pandas）。

默认 Conda 优先从官方仓库（defaults）安装包，但可切换至 Conda-Forge 获取最新版本。

```

(my-project)
ZhaoXu@LAPTOP-QD2IM9DB MINGW64 ~/repo/myproject
$ python main.py
Hello, conda!
2.2.3
D:\bianchengruanjian\anaconda\envs\my-project\Lib\site-packages\pandas\__init__.py
(my-project)

```