

第三周学习笔记

Part1-在终端配置 conda 初始化

查看 conda 路径

```
MINGW64:/c/Users/jessi  x  +  v  -  □  x
doctor      Display a health report for your environment.
export      Export a given environment
index       Update package index metadata files.
info        Display information about current conda install.
init        Initialize conda for shell interaction.
inspect     Tools for inspecting conda packages.
install     Install a list of packages into a specified conda environment.
list        List installed packages in a conda environment.
metapackage Specialty tool for generating conda metapackage.
notices     Retrieve latest channel notifications.
pack        See 'conda pack --help'.
package     Create low-level conda packages. (EXPERIMENTAL)
remove (uninstall) Remove a list of packages from a specified conda environment.
rename      Rename an existing environment.
render      Expand a conda recipe into a platform-specific recipe.
repo        See 'conda repo --help'.
repoquery  Advanced search for repodata.
run         Run an executable in a conda environment.
search      Search for packages and display associated information using the MatchSpec format.
server      See 'conda server --help'.
skeleton    Generate boilerplate conda recipes.
token       See 'conda token --help'.
update (upgrade) Update conda packages to the latest compatible version.

jessi@000000 MINGW64 ~
$ which conda
/c/Users/jessi/anaconda3/Scripts/conda
```

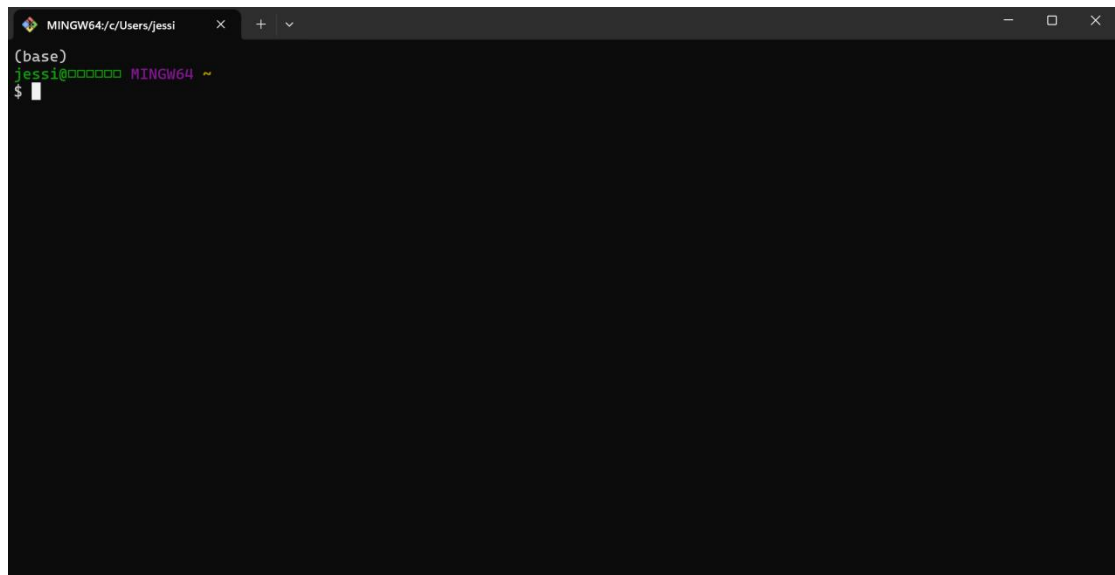
```
MINGW64:/c/Users/jessi  x  +  v  -  □  x
jessi@000000 MINGW64 ~
$ conda init bash
no change C:\Users\jessi\anaconda3\Scripts\conda.exe
no change C:\Users\jessi\anaconda3\Scripts\conda-env.exe
no change C:\Users\jessi\anaconda3\Scripts\conda-script.py
no change C:\Users\jessi\anaconda3\Scripts\conda-env-script.py
no change C:\Users\jessi\anaconda3\condabin\conda.bat
no change C:\Users\jessi\anaconda3\Library\bin\conda.bat
no change C:\Users\jessi\anaconda3\condabin\_conda_activate.bat
no change C:\Users\jessi\anaconda3\condabin\rename_tmp.bat
no change C:\Users\jessi\anaconda3\condabin\conda_auto_activate.bat
no change C:\Users\jessi\anaconda3\condabin\conda_hook.bat
no change C:\Users\jessi\anaconda3\Scripts\activate.bat
no change C:\Users\jessi\anaconda3\condabin\activate.bat
no change C:\Users\jessi\anaconda3\condabin\deactivate.bat
modified C:\Users\jessi\anaconda3\Scripts\activate
modified C:\Users\jessi\anaconda3\Scripts\deactivate
modified C:\Users\jessi\anaconda3\etc\profile.d\conda.sh
modified C:\Users\jessi\anaconda3\etc\fish\conf.d\conda.fish
no change C:\Users\jessi\anaconda3\shell\condabin\Conda.psm1
modified C:\Users\jessi\anaconda3\shell\condabin\conda-hook.ps1
no change C:\Users\jessi\anaconda3\Lib\site-packages\xontrib\conda.xsh
modified C:\Users\jessi\anaconda3\etc\profile.d\conda.csh
modified C:\Users\jessi\.bash_profile

==> For changes to take effect, close and re-open your current shell. <==

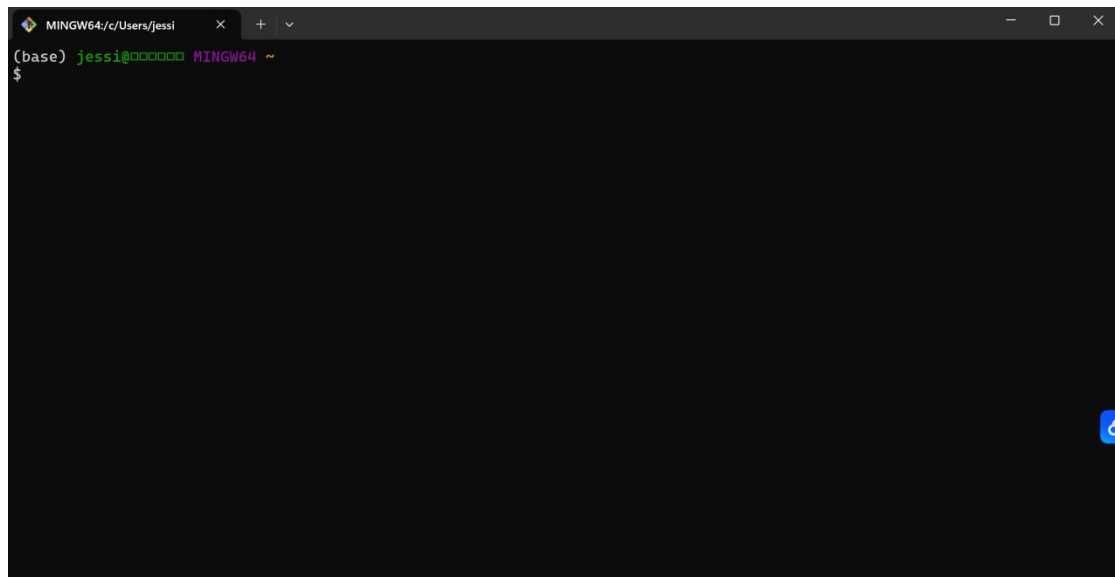
jessi@000000 MINGW64 ~
$
```

输入 code .可以打开 vs code，文件路径用中文存在不兼容问题。

Vs code 是文本编辑器，只能用来查看文本，不能查看其他类型文件。

A terminal window titled 'MINGW64/c/Users/jessi' with a dark background. The prompt is '(base) jessi@000000 MINGW64 ~'. The prompt character is a multi-line character that appears as a vertical bar with a small square at the top. The cursor is at the end of the prompt.

删除 13 行内容，base 无换行

A terminal window titled 'MINGW64/c/Users/jessi' with a dark background. The prompt is '(base) jessi@000000 MINGW64 ~'. The prompt character is a multi-line character that appears as a vertical bar with a small square at the top. The cursor is at the end of the prompt.

ps1 为上图显示的字符，可自定义

加入换行

```
MINGW64/c/Users/jessi x + v
(base) jessi@MINGW64 ~
$
```

Part2-创建 conda 环境

查看 conda 配置信息

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

active environment : base
active env location : C:\Users\jessi\anaconda3
shell level : 1
user config file : C:\Users\jessi\.condarc
populated config files : C:\Users\jessi\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\jessi\anaconda3 (writable)
conda av data dir : C:\Users\jessi\anaconda3\etc\conda
conda av metadata url : None
channel URLs : https://repo.anaconda.com/pkg/main/win-64
               https://repo.anaconda.com/pkg/main/noarch
               https://repo.anaconda.com/pkg/r/win-64
               https://repo.anaconda.com/pkg/r/noarch
               https://repo.anaconda.com/pkg/msys2/win-64
               https://repo.anaconda.com/pkg/msys2/noarch
package cache : C:\Users\jessi\anaconda3\pkgs
                 C:\Users\jessi\.conda\pkgs
                 C:\Users\jessi\AppData\Local\conda\conda\pkgs
envs directories : C:\Users\jessi\anaconda3\envs
                  C:\Users\jessi\.conda\envs
```

查看环境名称和路径

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

创建 conda 环境的原因：版本隔离+项目独立

创建 conda 环境

```
(base) jessi@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\jessi\anaconda3\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
libffi-3.4.4	hd77b12b_1	122 KB

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

## Package Plan ##

environment location: C:\Users\jessi\anaconda3\envs\prj2

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

The following packages will be downloaded:
```

package	build	
blas-1.0	mk1	6 KB
bottleneck-1.4.2	py39hc99e966_0	129 KB
brotli-python-1.0.9	py39h5da7b33_9	345 KB

激活环境

```
(base) jessi@□□□□□□ MINGW64 ~
$ conda activate prj1
(prj1)
jessi@□□□□□□ 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 'C:\\Users\\jessi\\anaconda3\\envs\\prj1\\Lib\\site-packages\\requests\\__init__.py'>
```

```
jessi@□□□□□□ MINGW64 ~
$ conda activate prj2
(prj2)
jessi@□□□□□□ MINGW64 ~
$
```

查看 conda 列表和环境

```
(prj2)
jessi@□□□□□□ MINGW64 ~
$ conda list
# packages in environment at C:\Users\jessi\anaconda3\envs\prj2:
#
# Name                                Version                                Build      Channel
blas                                  1.0                                    mkl
bottleneck                           1.4.2                                py39hc99e966_0
brotli-python                         1.0.9                                py39h5da7b33_9
ca-certificates                      2025.2.25                             haa95532_0
certifi                               2025.1.31                             py39haa95532_0
charset-normalizer                   3.3.2                                pyhd3eb1b0_0
icc_rt                                2022.1.0                              h6049295_2
idna                                  3.7                                   py39haa95532_0
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
```

安装 ipython 软件包

```
MINGW64/c/Users/jessi x + v
(base) jessi@MINGW64 ~
$ conda install ipython
Retrieving notices: ...working... done
Channels:
- defaults
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: \
```

镜像：国内开源，加快软件包安装速度

新建 conda 环境

安装 polars

```
MINGW64/c/Users/jessi x + v
done
(prj1)
jessi@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
>>>
```

安装 tushare

```
(prj1)
jessi@MINGW64 ~
$ pip install tushare
Looking in indexes: https://mirrors.tuna.tsinghua.edu.cn/pypi/web/simple
Collecting tushare
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/38/33/0b4ed09bfb3b69887c2545f1c587420c89685d36c377095e465cc000759b/tushare-1.4.21-py3-none-any.whl (142 kB)
Collecting pandas (from tushare)
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/29/d4/1244ab8edf173a10fd601f7e13b9566c1b525c4f365d6bee918e68381889/pandas-2.2.3-cp312-cp312-win_amd64.whl (11.5 MB)
    11.5/11.5 MB 30.0 MB/s eta 0:00:00
Requirement already satisfied: requests in c:\users\jessi\anaconda3\envs\prj1\lib\site-packages (from tushare) (2.32.3)
Collecting lxml (from tushare)
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/2b/9c/8abe21585d20ef70ad9cec7562da4332b764ed69ec29b7389d23dfabcea0/lxml-5.3.1-cp312-cp312-win_amd64.whl (3.8 MB)
    3.8/3.8 MB 37.8 MB/s eta 0:00:00
Collecting simplejson (from tushare)
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/bc/5d/4e243e937fa3560107c69f6f7c2eed8589163f5ed14324e864871daa2dd9/simplejson-3.20.1-cp312-cp312-win_amd64.whl (75 kB)
Collecting bs4 (from tushare)
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/51/bb/bf7aab772a159614954d84aa832c129624ba6c32faa559dfb200a534e50b/bs4-0.0.2-py2.py3-none-any.whl (1.2 kB)
Collecting websocket-client<=0.57.0 (from tushare)
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/5a/84/44687a29792a70e111c5c477230a72c4b957d88d16141199bf9acb7537a3/websocket_client-1.8.0-py3-none-any.whl (58 kB)
Collecting tqdm (from tushare)
  Downloading https://mirrors.tuna.tsinghua.edu.cn/pypi/web/packages/d0/30/dc54f88dd4a2b5dc8a0279bdd7270e735851848b762aeb1c1184ed1f6b14/tqdm-4.67.1-py3-none-any.whl (78 kB)
Collecting beautifulsoup4 (from bs4->tushare)
```

重建 conda 环境

```
(base)
jessi@MINGW64 ~
$ conda env create
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): \
```

Conda 和 python 的关系: conda 不仅可以管理 python, 还可以管理其他依赖项 (r 语言、C++等)

Conda-forge 与 conda 的关系: 协作, conda-forge 为软件包仓库, 丰富软件包资源, 优势互补

创建文件夹代码: mkdir, 注意文件名称要求

安装常用扩展

FileEditSelectionViewGo...myproject

environment.ymlmain.pyExtension: Python X

EXTENSIONS: MARKETPLACEpython

PythonPython language support with exte...MicrosoftInstalling

Python DebuggerPython Debugger extension using d...MicrosoftInstalling

Python IndentCorrect Python indentationKevin Rose13.5M4★Install

Python for VSCodePython language extension for vsco...Thomas Haakon Townse...5.9M2★Install

Python Extension PackPopular Visual Studio Code extensio...Don Jayamanne11M4.5★Install


autoDocstring - Pyt...Generates python docstrings autom...Nils Werner12.9M5★Install

Python Environme...View and manage Python environm...Don Jayamanne11.1M3.5★Install


Python-PreviewProvide Preview for Python Executio...dongli2.2M4.5★Install

Python ExtendedPython Extended is a vscode snippe...Taiwo Kareem1.7M4★Install

Python Path1.4M4★



Python

Microsoft  microsoft.com | 163,098,535 | ★★★★★ (609)

Python language support with extension access points for IntelliSense (PyLanc...

Installing ✓ Auto Update ⚙

DETAILSFEATURESCHANGELOGEXTENSION PACK

Python extension for Visual Studio Code

A Visual Studio Code extension with rich support for the Python language (for all actively supported Python versions), providing access points for extensions to seamlessly integrate and offer support for IntelliSense (PyLance), debugging (Python Debugger), formatting, linting, code navigation, refactoring, variable explorer, test explorer, and more!

Support for vscod.dev

The Python extension does offer some support when running on vscod.dev (which includes github.dev). This includes partial IntelliSense for open files in the editor.

Installed extensions

The Python extension will automatically install the following extensions by default to provide the best Python development experience in VS Code:

- [PyLance](#) - to provide performant Python language support
- [Python Debugger](#) - to provide a seamless debug experience with

Marketplace

Identifier	ms-python.python
Version	2025.2.0
Published	2016-01-19, 23:03:11
Last	2025-03-26, 18:52:33
Released	

Categories

ProgrammingLanguagesDebuggersData ScienceMachine Learning

Resources

MarketplaceIssuesRepository