

在 vscode 里面输入 hello 保存，在终端里面查看

```
胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/mywork
$ python mywork.py

胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/mywork
$ ls -l
total 1
-rw-r--r-- 1 胡 197121 22  3月 23 13:51 mywork.py

胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/mywork
$ cat mywork.py
print("hello world")

胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/mywork
$ |
```

创建 3.12python

```
胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/mywork
$ conda create -n mywork python=3.12 openpyxl polars
WARNING: A conda environment already exists at 'D:\Anaconda\envs\mywork'
```

查看配置信息

```
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ conda info

      active environment : base
      active env location : D:\Anaconda
            shell level : 1
       user config file : C:\Users\胡\.condarc
 populated config files : D:\Anaconda\.condarc
                        C:\Users\胡\.condarc
         conda version : 24.11.3
    conda-build version : 24.9.0
         python version : 3.12.7.final.0
            solver type : https://repo.anaconda.com/pkgsrc/win-64
                          按住 Ctrl 并单击可访问链接
       virtual packages : __conda=24.11.3=0
                        __cuda=12.3=0
                        __win=0=0
      base environment : D:\Anaconda (writable)
     conda av data dir : D:\Anaconda\etc\conda
```

查看 conda 的环境名称和路径

```
(base)
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ conda env list

# conda environments:
#
base                  * D:\Anaconda

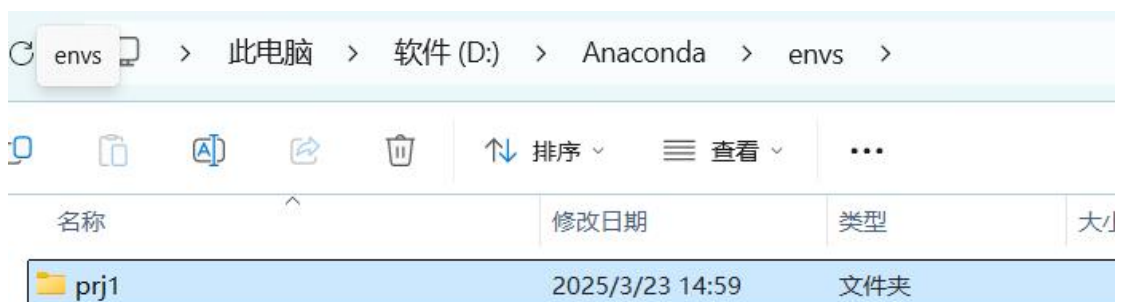
(base)
胡@LAPTOP-V1BKRF4A MINGW64 ~
```

创建两个 conda 环境

```
(base)
胡@LAPTOP-V1BKRF4A 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
```



```

(base)
胡@LAPTOP-V1BKRF4A 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

```

名称	修改日期	类型	大小
prj1	2025/3/23 14:59	文件夹	
prj2	2025/3/23 15:03	文件夹	

```

胡@LAPTOP-V1BKRF4A MINGW64 ~
$ conda activate prj1
(prj1)
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ which python
/d/Anaconda/envs/prj1/python
(prj1)
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ python --version
Python 3.12.9
(prj1)
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ python
Python 3.12.9 | packaged by Anaconda, Inc. |
Type "help", "copyright", "credits" or "licen
>>> quit()
(prj1)

```

```

胡@LAPTOP-V1BKRF4A MINGW64 ~
$ conda activate prj2
(prj2)
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ which python
/d/Anaconda/envs/prj2/python
(prj2)
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ python version
D:\Anaconda\envs\prj2\python.exe
(prj2)
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ python --version
Python 3.9.21
(prj2)

```

使用 conda list 查看软件包列表

```

胡@LAPTOP-V1BKRF4A 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

```

利用 conda install 安装软件包
ipython


```

胡@LAPTOP-V1BKRF4A 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\prj2

  added / updated specs:
    - ipython

The following packages will be downloaded:

  package | build

```

配置清华镜像

```

! .condarc
1  channels:
2  | - conda-forge
3  show_channel_urls: true
4  default_channels:
5  | - Follow link (ctrl + click) 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

```

```

! .condarc
1  channels:
2  | - conda-forge
3  | - defaults
4  show_channel_urls: true
5  default_channels:
6  | - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkg/main
7  | - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkg/r
8  | - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkg/msys2
9  custom_channels:
10 | conda-forge: https://mirrors.tuna.tsinghua.edu.cn/anaconda/cloud
11 | pytorch: https://mirrors.tuna.tsinghua.edu.cn/anaconda/cloud
12 channel priority: strict

```

```

胡@LAPTOP-V1BKRF4A MINGW64 ~
$ conda activate prj1
(prj1)
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ conda install polars
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):
Solving environment: done

```

用 pip install

```

胡@LAPTOP-V1BKRF4A MINGW64 ~
$ python -m pip install --upgrade pip
Requirement already satisfied: pip in d:\anaconda\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)
  1.8/1.8 MB 3.6 MB/s eta 0:00:00
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)
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ pip config set global.index-url https://mirrors.tuna.tsinghua.edu.cn/pypi/web/simple
Writing to C:\Users\胡\AppData\Roaming\pip\pip.ini
(prj1)
胡@LAPTOP-V1BKRF4A MINGW64 ~
$ python
Python 3.12.7 | packaged by Anaconda, Inc. | (main, Oct 4 2024, 13:17:2
Type "help", "copyright", "credits" or "license" for more information.
>>> import tushare
>>> tushare.__version__
'1.4.19'
>>> |

```

导出环境资源文件，并删除 conda 文件

```

胡@LAPTOP-V1BKRF4A MINGW64 ~
$ conda env export
name: base
channels:
- conda-forge
- defaults
- https://repo.anaconda.com/pkgs/main
- https://repo.anaconda.com/pkgs/r
- https://repo.anaconda.com/pkgs/msys2
dependencies:
- _anaconda_depends=2024.10=py312_mkl_0
- aext-assistant=4.1.0=py312haa95532_jl4_0
- aext-assistant-server=4.1.0=py312haa95532_0
- aext-core=4.1.0=py312haa95532_jl4_0
- aext-core-server=4.1.0=py312haa95532_0
- aext-panels=4.1.0=py312haa95532_0
- aext-panels-server=4.1.0=py312haa95532_0
- aext-project-filebrowser-server=4.1.0=py312haa
- aext-share-notebook=4.1.0=py312haa95532_0
- aext-share-notebook-server=4.1.0=py312haa95532
- aext-shared=4.1.0=py312haa95532_0
- aext-share-server=4.1.0=py312haa95532_0

```

```

environment.yml
1  name: base
2  channels:
3    - conda-forge
4    - defaults
5    - https://repo.anaconda.com/pkgs/main
6    - https://repo.anaconda.com/pkgs/r
7    - https://repo.anaconda.com/pkgs/msys2
8  dependencies:
9    - _anaconda_depends=2024.10=py312_mkl_0
10   - aext-assistant=4.1.0=py312haa95532_jl4_0
11   - aext-assistant-server=4.1.0=py312haa95532_0
12   - aext-core=4.1.0=py312haa95532_jl4_0
13   - aext-core-server=4.1.0=py312haa95532_0
14   - aext-panels=4.1.0=py312haa95532_0
15   - aext-panels-server=4.1.0=py312haa95532_0
16   - aext-project-filebrowser-server=4.1.0=py312haa95532_0
17   - aext-share-notebook=4.1.0=py312haa95532_0
18   - aext-share-notebook-server=4.1.0=py312haa95532_0
19   - aext-shared=4.1.0=py312haa95532_0
20   - aiobotocore=2.12.3=py312haa95532_0
21   - aiohappyeyeballs=2.4.0=py312haa95532_0
22   - aiohttp=3.10.5=py312h827c3e9_0
23   - aioitertools=0.7.1=pyhd3eb1b0_0
24   - aiosignal=1.2.0=pyhd3eb1b0_0
25   - alabaster=0.7.16=py312haa95532_0
26   - alembic=1.13.3=py312haa95532_0
27   - altair=5.0.1=py312haa95532_0
28   - anaconda-anon-usage=0.4.4=py312hfc23b7f_100
29   - anaconda-catalogs=0.2.0=py312haa95532_1
30   - anaconda-cli-base=0.4.2=py312haa95532_0
31   - anaconda-client=1.13.0=py312haa95532_0
32   - anaconda-cloud-auth=0.7.2=py312haa95532_0
33   - anaconda-navigator=2.6.3=py312haa95532_0
34   - anaconda-project=0.11.1=py312haa95532_0
35   - anaconda-toolbox=4.1.0=py312haa95532_0
36   - anaconda powershell prompt=1.1.0=haa95532_0

```

```

胡@LAPTOP-V1BKRF4A MINGW64 ~
$ conda env list

# conda environments:
#
base                D:\Anaconda
prj2                D:\Anaconda\envs\prj2

```

```

胡@LAPTOP-V1BKRF4A MINGW64 ~
$ conda env list

# conda environments:
#
base                        D:\Anaconda
prj1                        D:\Anaconda\envs\prj1
prj2                        D:\Anaconda\envs\prj2

胡@LAPTOP-V1BKRF4A MINGW64 ~
$ conda env remove -n prj1

Remove all packages in environment D:\Anaconda\

## Package Plan ##

   environment location: D:\Anaconda\envs\prj1

The following packages will be REMOVED:

```

创建项目目录

```

胡@LAPTOP-V1BKRF4A MINGW64 ~/repo
$ cd myproject
(base)
胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/myproject
$ cat environment.yml
name: myproject
channels:
  - conda-forge
dependencies:
  - python=3.12(base)
胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/myproject
$ |

```



```

胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/myproject
$ conda activate myproject
(myproject)
胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/myproject
$ conda list
# packages in environment at D:\Anaconda\envs\myproject:
#
# Name                                Version                                Build                                Channel
bzip2                                1.0.8                                h2466b09_7                          conda-forge
ca-certificates                      2025.1.31                             h56e8100_0                          conda-forge
libexpat                             2.6.4                                he0c23c2_0                          conda-forge
libffi                               3.4.6                                h537db12_0                          conda-forge
liblzma                              5.6.4                                h2466b09_0                          conda-forge
libsqlite                             3.49.1                               h67fdade_2                          conda-forge
libzlib                              1.3.1                                h2466b09_2                          conda-forge
openssl                              3.4.1                                ha4e3fda_0                          conda-forge
pip                                  25.0.1                               pyh8b19718_0                        conda-forge
python                               3.12.9                               h3f84c4b_1_cpython                  conda-forge
setuptools                           75.8.2                               pyhff2d567_0                        conda-forge
tk                                   8.6.13                               h5226925_1                          conda-forge
tzdata                               2025a                                h78e105d_0                          conda-forge
ucrt                                 10.0.22621.0                         h57928b3_1                          conda-forge
vc                                   14.3                                 hbf610ac_24                        conda-forge
vc14_runtime                         14.42.34438                          hfd919c2_24                        conda-forge
wheel                                0.45.1                               pyhd8ed1ab_1                        conda-forge
(myproject)
胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/myproject

```

```

(myproject)
胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/myproject
$ python main.py
Hello, conda!
(myproject)
胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/myproject
$

```

```

胡@LAPTOP-V1BKRF4A MINGW64 ~/repo/myproject
$ curl -O https://edg.epa.gov/EPADDataCommons/public/OA/EPA_SmartLocationDatabase_V3_Jan_2021_Final.csv
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload   Total   Spent    Left  Speed
  2   192M    2  5648k    0     0   451k      0  0:07:15  0:00:12  0:07:03  456k

```

```

main.py > ...
3
4
5     if __name__ == "__main__":
6         main()
7     import pandas as pd
8
9
10    def main():
11        """
12        Answers the question:
13
14        What percentage of U.S. residents live highly walkable neighborhoods?
15
16        "15.26" is the threshold on the index for a highly walkable area.
17        """
18        csv_file = "../EPA_SmartLocationDatabase_V3_Jan_2021_Final.csv"
19        highly_walkable = 15.26
20
21        df = pd.read_csv(csv_file)
22
23        total_population = df["TotPop"].sum()
24        highly_walkable_pop = df[df["NatwalkInd"] >= highly_walkable]["TotPop"].sum()
25
26        percentage = (highly_walkable_pop / total_population) * 100.0
27
28        print(
29            f"{percentage:.2f}% of U.S. residents live in highly " "walkable neighborhoods."
30        )
31
32
33    if __name__ == "__main__":
34        main()

```