

Week03 作业

一、在终端配置 Conda 初始化

```
MINGW64/c/Users/Lenovo
Exception in thread Thread-5 (_readerthread):
Traceback (most recent call last):
  File "C:\Users\Lenovo\miniconda3\Lib\threading.py", line 1075, in _bootstrap_i
nner
    self.run()
  File "C:\Users\Lenovo\miniconda3\Lib\threading.py", line 1012, in run
    self._target(*self._args, **self._kwargs)
  File "C:\Users\Lenovo\miniconda3\Lib\subprocess.py", line 1601, in _readerthre
ad
    buffer.append(fh.read())
    ^^^^^^^^^^^
UnicodeDecodeError: 'gbk' codec can't decode byte 0xa7 in position 595: illegal
multibyte sequence
Unexpected cygpath error, fallback to manual path conversion
AttributeError: 'NoneType' object has no attribute 'strip'
(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$
```

```
File Edit Selection View Go ... Search
Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More

Program • D profile.d •
1 Select a language, or fill with template, or open a different editor to get started.
Start typing to dismiss or don't show this again.

MINGW64/c/Users/Lenovo
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Unexpected cygpath error, fallback to manual path conversion
AttributeError: 'NoneType' object has no attribute 'strip'
(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ code /c:/Program Files/Git/etc/profile.d/
(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ code /c:/Program Files/Git/etc/profile.d/
(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ |
```

```
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Restricted Mode is intended for safe code browsing. Trust this window to enable all features. Manage Learn More

EXTENSIONS MARKETPLACE
@idms-python.python
Python language support with vete...
Microsoft

C:\Users\Lenovo> miniconda3 > Lib > subprocess.py > ...
70 except ModuleNotFoundError:
71     _mswindows = False
72 else:
73
74
75 #
76 _ci File "C:\Users\Lenovo\miniconda3\Lib\threading.py", line 1075, in _bootstrap_i
nner
77     self.run()
78 if File "C:\Users\Lenovo\miniconda3\Lib\threading.py", line 1012, in run
79     self._target(*self._args, **self._kwargs)
80 File "C:\Users\Lenovo\miniconda3\Lib\subprocess.py", line 1601, in _readerthre
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81     buffer.append(fh.read())
82
83 UnicodeDecodeError: 'gbk' codec can't decode byte 0xa7 in position 595: illegal
84 multibyte sequence
85 Unexpected cygpath error, fallback to manual path conversion
86 AttributeError: 'NoneType' object has no attribute 'strip'
87 (base)
88 Lenovo@DESKTOP-VCHBCBH MINGW64 ~
89 $ |
90
91 "STD_INPUT_HANDLE", "STD_OUTPUT_HANDLE",
92 "STD_ERROR_HANDLE", "SH_HIDE",
93 "STARTF_USESTDHANDLES", "STARTF_USESHOWWINDOW",
94 "STARTUPINFO",
95 "ABOVE_NORMAL_PRIORITY_CLASS", "BELOW_NORMAL_PRIORITY_CLASS",
96 "HIGH_PRIORITY_CLASS", "IDLE_PRIORITY_CLASS",
97 "NORMAL_PRIORITY_CLASS", "REALTIME_PRIORITY_CLASS",
98 "CREATE_NO_WINDOW", "DETACHED_PROCESS",
99 "CREATE_DEFAULT_ERROR_MODE", "CREATE_BREAKAWAY_FROM_JOB"))
100 else:
101     if _can_fork_exec:
```

二、创建 conda 环境

```
MINGW64/c/Users/Lenovo
C:\Users\Lenovo\.conda\pkgs
C:\Users\Lenovo\AppData\Local\conda\conda\pkgs
envs directories : C:\Users\Lenovo\miniconda3\envs
                  C:\Users\Lenovo\.conda\envs
                  C:\Users\Lenovo\AppData\Local\conda\conda\envs
platform : win-64
user-agent : conda/25.1.1 requests/2.32.3 CPython/3.12.9 windows/10
windows/10.0.19044 solver/libmamba conda-libmamba-solver/25.1.1 libmambapy/2.0.
5 aau/0.5.0 c/.s/.e/.
administrator : False
netrc file : None
offline mode : False

(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ conda env list

# conda environments:
#
base                  * C:\Users\Lenovo\miniconda3

(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ |
```

安装 python 和 requests

```
MINGW64/c/Users/Lenovo
(base)
Lenovo@DESKTOP-VCHBCBH 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\Lenovo\miniconda3\envs\prj1

added / updated specs:
- python=3.12
- requests

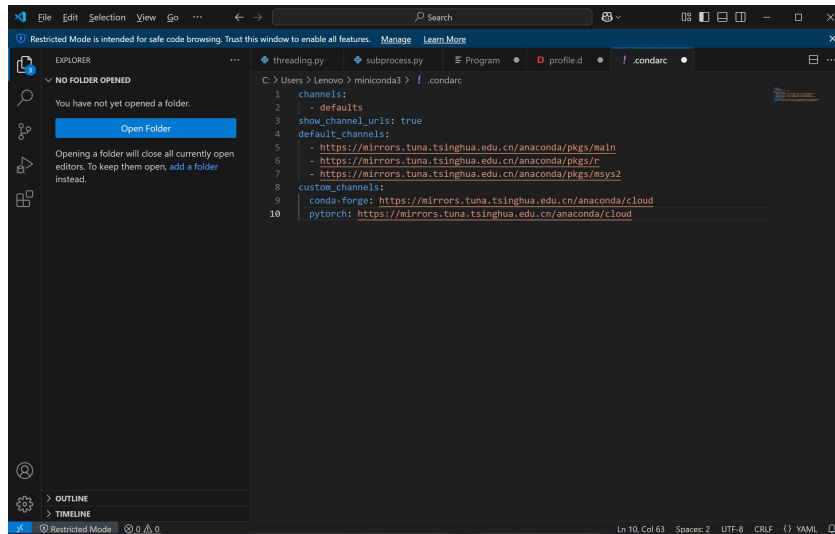
The following packages will be downloaded:

package----- build-----
brotili-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
openssl-3.0.16 h3f729d1_0 7.8 MB
pip-25.0 py312haa95532_0 3.0 MB
pysocks-1.7.1 py312haa95532_0 34 KB
python-3.12.9 h14ffc60_0 16.5 MB
requests-2.32.3 py312haa95532_1 124 KB
setuptools-75.8.0 py312haa95532_0 2.2 MB
sqlite-3.45.3 h2bbff1b_0 973 KB
tk-8.6.14 h0416ee5_0 3.5 MB
tzdata-2025a h04d1e81_0 117 KB
```

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

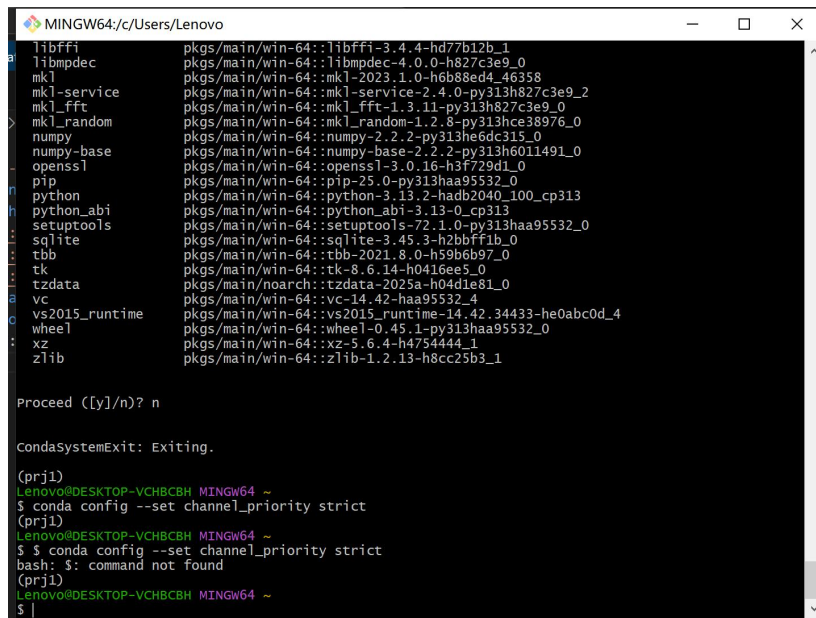
```
MINGW64/c/Users/Lenovo
vc 14.42 haa95532_4
vs2015_runtime 14.42.34433 he0abc0d_4
wheel 0.45.1 py39haa95532_0
(prj2)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ conda activate prj1
(prj1)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ conda list
# packages in environment at C:\Users\Lenovo\miniconda3\envs\prj1:
#
# Name Version Build Channel
brotili-python 1.0.9 py312h5da7b33_9 Channel
bzip2 1.0.8 h2bbff1b_6 Channel
ca-certificates 2025.2.25 haa95532_0 Channel
certifi 2025.1.31 py312haa95532_0 Channel
charset-normalizer 3.3.2 pyhd3eb1b0_0 Channel
expat 2.6.4 h8ddb27b_0 Channel
idna 3.7 py312haa95532_0 Channel
libffi 3.4.4 hd77b12b_1 Channel
openssl 3.0.16 h3f729d1_0 Channel
pip 25.0 py312haa95532_0 Channel
pysocks 1.7.1 py312haa95532_0 Channel
python 3.12.9 h14ffc60_0 Channel
requests 2.32.3 py312haa95532_1 Channel
setuptools 75.8.0 py312haa95532_0 Channel
sqlite 3.45.3 h2bbff1b_0 Channel
tk 8.6.14 h0416ee5_0 Channel
tzdata 2025a h04d1e81_0 Channel
urllib3 2.3.0 py312haa95532_0 Channel
vc 14.42 haa95532_4 Channel
vs2015_runtime 14.42.34433 he0abc0d_4 Channel
wheel 0.45.1 py312haa95532_0 Channel
win_inet_pton 1.1.0 py312haa95532_0 Channel
xz 5.6.4 h4754444_1 Channel
zlib 1.2.13 h8cc25b3_1 Channel
(prj1)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ |
```

三、Conda-forge 清华镜像



The screenshot shows the VS Code editor with a file named `.condarc` open. The file content is as follows:

```
1 channels:
2   - defaults
3 show_channel_urls: true
4 default_channels:
5   - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkgs/main
6   - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkgs/r
7   - https://mirrors.tuna.tsinghua.edu.cn/anaconda/pkgs/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
```



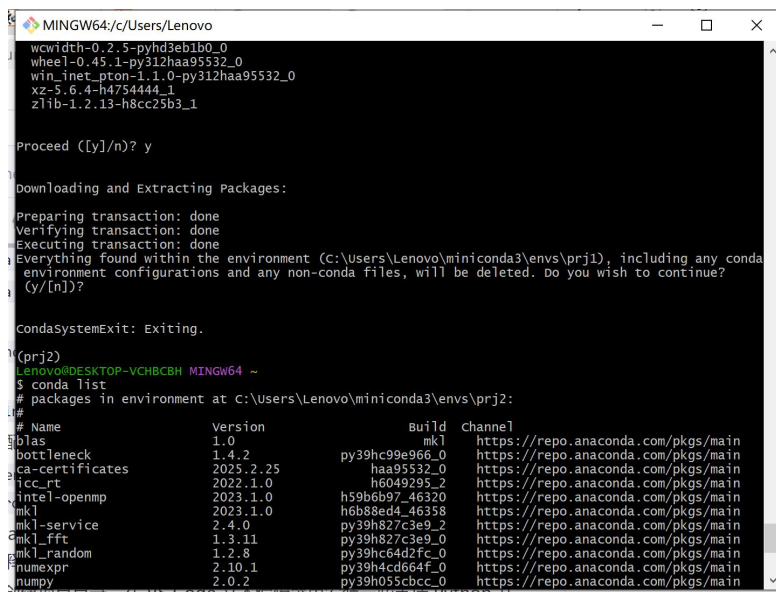
The screenshot shows a Windows command prompt window with the following commands and output:

```
pkgs/main/win-64::libffi-3.4.4-hd77b12b_1
pkgs/main/win-64::libmpdec-4.0.0-h827c3e9_0
pkgs/main/win-64::mkl-2023.1.0-h6b88ed4_46358
pkgs/main/win-64::mkl-service-2.4.0-py313h827c3e9_2
pkgs/main/win-64::mkl_fft-1.3.11-py313h827c3e9_0
pkgs/main/win-64::mkl_random-1.2.8-py313hce38976_0
pkgs/main/win-64::numpy-2.2.2-py313he6dc315_0
pkgs/main/win-64::numpy-base-2.2.2-py313he6011491_0
pkgs/main/win-64::openssl-3.0.16-h3f729d1_0
pkgs/main/win-64::pip-25.0-py313haa95532_0
pkgs/main/win-64::python-3.13.2-hadb2040_100_cp313
pkgs/main/win-64::python_abi-3.13.0_cp313
pkgs/main/win-64::setuptools-72.1.0-py313haa95532_0
pkgs/main/win-64::sqlite-3.45.3-h2bbff1b_0
pkgs/main/win-64::tk-8.6.14-h0416ee5_0
pkgs/main/win-64::tzdata-2025a-h04d1e81_0
pkgs/main/win-64::vc-14.42-haa95532_4
pkgs/main/win-64::vs2015_runtime-14.42.34433-he0abc0d_4
pkgs/main/win-64::wheel-0.45.1-py313haa95532_0
pkgs/main/win-64::xz-5.6.4-h4754444_1
pkgs/main/win-64::zlib-1.2.13-h8cc25b3_1

Proceed ([y]/n)? n

CondaSystemExit: Exiting.

(prj1)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ conda config --set channel_priority strict
(prj1)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ $ conda config --set channel_priority strict
bash: $: command not found
(prj1)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ |
```



The screenshot shows a Windows command prompt window with the following commands and output:

```
wcwidth-0.2.5-pyhd3eb1b0_0
wheel-0.45.1-py313haa95532_0
win_inet_pton-1.1.0-py313haa95532_0
xz-5.6.4-h4754444_1
zlib-1.2.13-h8cc25b3_1

Proceed ([y]/n)? y

Downloading and Extracting Packages:
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
Everything found within the environment (C:\Users\Lenovo\miniconda3\envs\prj1), including any conda
environment configurations and any non-conda files, will be deleted. Do you wish to continue?
(y/[n])?

CondaSystemExit: Exiting.

(prj2)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ conda list
# packages in environment at C:\Users\Lenovo\miniconda3\envs\prj2:
#
# Name Version Build Channel
blas 1.0 mkl https://repo.anaconda.com/pkgs/main
bottleneck 1.4.2 py39hc99e966_0 https://repo.anaconda.com/pkgs/main
ca-certificates 2025.2.25 haa95532_0 https://repo.anaconda.com/pkgs/main
icc_rt 2022.1.0 h6049295_2 https://repo.anaconda.com/pkgs/main
intel-openmp 2023.1.0 h59b6b97_46320 https://repo.anaconda.com/pkgs/main
mkl 2023.1.0 h6b88ed4_46358 https://repo.anaconda.com/pkgs/main
mkl-service 2.4.0 py39h827c3e9_2 https://repo.anaconda.com/pkgs/main
mkl_fft 1.3.11 py39h827c3e9_0 https://repo.anaconda.com/pkgs/main
mkl_random 1.2.8 py39hc64d2fc_0 https://repo.anaconda.com/pkgs/main
numexpr 2.10.1 py39h4cd664f_0 https://repo.anaconda.com/pkgs/main
numpy 2.0.2 py39h05cbcc_0 https://repo.anaconda.com/pkgs/main
```

四、环境配置的导出与重建

```
MINGW64/c/Users/Lenovo
(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ pip install tushare
Collecting tushare
  Downloading tushare-1.4.19-py3-none-any.whl.metadata (3.1 kB)
Collecting pandas (from tushare)
  Downloading pandas-2.2.3-cp312-cp312-win_amd64.whl.metadata (19 kB)
Requirement already satisfied: requests in c:\users\lenovo\miniconda3\lib\site-packages (from tushare) (2.32.3)
Collecting lxml (from tushare)
  Downloading lxml-5.3.1-cp312-cp312-win_amd64.whl.metadata (3.8 kB)
Collecting simplejson (from tushare)
  Downloading simplejson-3.20.1-cp312-cp312-win_amd64.whl.metadata (3.4 kB)
Collecting bs4 (from tushare)
  Downloading bs4-0.0.2-py2.py3-none-any.whl.metadata (411 bytes)
Collecting websocket-client>=0.57.0 (from tushare)
  Downloading websocket_client-1.8.0-py3-none-any.whl.metadata (8.0 kB)
Requirement already satisfied: tqdm in c:\users\lenovo\miniconda3\lib\site-packages (from tushare) (4.67.1)
Collecting beautifulsoup4 (from bs4->tushare)
  Downloading beautifulsoup4-4.13.3-py3-none-any.whl.metadata (3.8 kB)
Collecting numpy>=1.26.0 (from pandas->tushare)
  Downloading numpy-2.2.4-cp312-cp312-win_amd64.whl.metadata (60 kB)
Collecting python-dateutil>=2.8.2 (from pandas->tushare)
```

```
MINGW64/c/Users/Lenovo
soupsieve-2.6 tushare-1.4.19 tzdata-2025.1 websocket-client-1.8.0
(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ python -m pip install --upgrade pip
Requirement already satisfied: pip in c:\users\lenovo\miniconda3\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 32.8 kB/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
(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$ pip config set global.index-url https://mirrors.tuna.tsinghua.edu.cn/pypi/web/simple
Writing to c:\Users\Lenovo\AppData\Roaming\pip\pip.ini
(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~
$
```

五、编写和运行 python 程序

```
File Edit Selection View Go ... myproject
EXPLORER
  MYPROJECT
    environment.yml
environment.yml
1 name: my-project
2 channels:
3   - defaults
4 dependencies:
5   - python=3.12

MINGW64/c/Users/Lenovo/repo/myproject
- https://repo.anaconda.com/pkgs/main
- https://repo.anaconda.com/pkgs/msys2
- conda-forge
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done

Downloading and Extracting Packages:
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
# $ conda activate my-project
#
# To deactivate an active environment, use
#
# $ conda deactivate
#
(base)
Lenovo@DESKTOP-VCHBCBH MINGW64 ~/repo/myproject
$
```

