

作业要求：

1. 安装Anaconda；安装虚拟环境，删除；
2. 运行课件附带所有的.ipynb文件；

实现过程：

· 安装Anaconda

在官网下载并安装即可 <https://www.anaconda.com/products/distribution>

· 安装、删除虚拟环境

在终端输入 conda create -n test python=3.9 创建新环境

```

zhanghanwen — conda create -n test python=3.9 — 113x36
To access the notebook, open this file in a browser:
  file:///Users/zhanghanwen/Library/Jupyter/runtime/nbserver-52124-open.html
Or copy and paste one of these URLs:
  http://localhost:8888/?token=9888b34a4608b9b665abd52839d2707fb82c2340e3b0aac7f
  or http://127.0.0.1:8888/?token=9888b34a4608b9b665abd52839d2707fb82c2340e3b0aac7f
[I 16:24:41.162 NotebookApp] Writing notebook-signing key to /Users/zhanghanwen/Library/Jupyter/notebook_secret
[W 16:24:41.163 NotebookApp] Notebook Desktop/CV_2022/Introduction to Python/Python-00.ipynb is not trusted
[I 16:24:41.759 NotebookApp] Kernel started: d6f8f077-1557-4a66-b228-cb89ef5ee85f, name: python3
[W 16:25:48.753 NotebookApp] Notebook Desktop/CV_2022/Introduction to Python/Python-01.ipynb is not trusted
[I 16:25:49.789 NotebookApp] Kernel started: 9a4a248a-0f66-4f9e-91ab-85c99c439150, name: python3
[I 16:26:00.134 NotebookApp] Starting buffering for 9a4a248a-0f66-4f9e-91ab-85c99c439150:85355c0235ae46d1a0f218f3
921036bf
[W 16:26:02.015 NotebookApp] Notebook Desktop/CV_2022/Introduction to Python/Python-02.ipynb is not trusted
[I 16:26:02.911 NotebookApp] Kernel started: f8591979-8d40-4623-a1be-3c649d0dbc7b, name: python3
[W 16:26:21.623 NotebookApp] Notebook Desktop/CV_2022/Introduction to Python/Python-03.ipynb is not trusted
[I 16:26:23.870 NotebookApp] Kernel started: c718e3c1-8fe9-41aa-a0a6-a17eacff8ae7, name: python3
[I 16:26:36.753 NotebookApp] Starting buffering for c718e3c1-8fe9-41aa-a0a6-a17eacff8ae7:47cc383529594c758fa355d5
c380d465
[I 16:26:41.720 NotebookApp] Saving file at /Desktop/CV_2022/Introduction to Python/Python-00.ipynb
[W 16:26:41.723 NotebookApp] Notebook Desktop/CV_2022/Introduction to Python/Python-00.ipynb is not trusted
^C[I 16:26:56.076 NotebookApp] 中断
启动 notebooks 在本地路径：/Users/zhanghanwen
4 活跃的服务
Jupyter Notebook 6.4.5 is running at:
http://localhost:8888/?token=9888b34a4608b9b665abd52839d2707fb82c2340e3b0aac7f
  or http://127.0.0.1:8888/?token=9888b34a4608b9b665abd52839d2707fb82c2340e3b0aac7f
关闭服务 /y/[n]y
[IC 16:26:57.556 NotebookApp] 关闭确定
[II 16:26:57.558 NotebookApp] 关闭 4 服务
[II 16:26:57.767 NotebookApp] Kernel shutdown: d6f8f077-1557-4a66-b228-cb89ef5ee85f
[II 16:26:57.768 NotebookApp] Kernel shutdown: 9a4a248a-0f66-4f9e-91ab-85c99c439150
[II 16:26:57.768 NotebookApp] Kernel shutdown: f8591979-8d40-4623-a1be-3c649d0dbc7b
[II 16:26:57.768 NotebookApp] Kernel shutdown: c718e3c1-8fe9-41aa-a0a6-a17eacff8ae7
[II 16:26:57.768 NotebookApp] Shutting down 0 terminals
zhanghanwen@zhanghanwendeMacBook-Air ~ % conda create -n test python=3.9
Collecting package metadata (current repodata.json): | ]
```

使用 conda env list 查看所有环境，可以发现test环境已经成功创建

```

zhanghanwen — zsh — 113x36
unidecode          1.2.0      pyhd3eb1b0_0
unixodbc           2.3.9      ha1f1e3a3_0
urllib3            1.26.7     pyhd3eb1b0_0
watchdog            2.1.3      py39hd5f6b7e_0
wcwidth             0.2.5      pyhd3eb1b0_0
webencodings       0.5.1      py39hecd8cb5_1
werkzeug            2.0.2      pyhd3eb1b0_0
wheel               0.37.0     pyhd3eb1b0_1
whichcraft          0.6.1      pyhd3eb1b0_0
widgetsnbextension 3.5.1      py39hecd8cb5_0
wrapt               1.12.1     py39h9ed2024_1
wurlitzer           2.1.1      py39hecd8cb5_0
xlrd                2.0.1      pyhd3eb1b0_0
xlsxwriter         3.0.1      pyhd3eb1b0_0
xlwings              0.24.9     py39hecd8cb5_0
xlwt                1.3.0      py39hecd8cb5_0
xmltodict           0.12.0     pyhd3eb1b0_0
xz                  5.2.5      h1de35cc_0
yaml                0.2.5      ha1f1e3a3_0
yapf                0.31.0     pyhd3eb1b0_0
zeromq              4.3.4      h23ab428_0
zfp                 0.5.5      h23ab428_6
zict                2.0.0      pyhd3eb1b0_0
zipp                3.6.0      pyhd3eb1b0_0
zlib                1.2.11     h1de35cc_3
zope                1.0       py39hecd8cb5_1
zope.event          4.5.0      py39hecd8cb5_0
zope.interface      5.4.0      py39h9ed2024_0
zstd                1.4.9      h322a384_0
zhanghanwen@zhanghanwendeMacBook-Air ~ % conda env list
# conda environments:
#
base                  /Users/zhanghanwen/opt/anaconda3
test                  /Users/zhanghanwen/opt/anaconda3/envs/test
zhanghanwen@zhanghanwendeMacBook-Air ~ % ]
```

使用 conda install nb_conda 命令安装 nb_conda 包

```

[I 16:23:05.245 NotebookApp] Shutting down 0 terminals
zhanghanwen@zhanghanwendeMacBook-Air ~ % conda install nb_conda
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##

environment location: /Users/zhanghanwen/opt/anaconda3

added / updated specs:
- nb_conda

The following packages will be downloaded:

  package          | build
  conda-4.14.0    | py39hecd8cb5_0      925 KB
  nb_conda-2.2.1  | py39hecd8cb5_1      33 KB
  nb_conda_kernels-2.3.1 | py39hecd8cb5_0      33 KB

Total:           991 KB

The following NEW packages will be INSTALLED:

  nb_conda          pkgs/main/osx-64::nb_conda-2.2.1-py39hecd8cb5_1
  nb_conda_kernels   pkgs/main/osx-64::nb_conda_kernels-2.3.1-py39hecd8cb5_0

The following packages will be UPDATED:

  conda             4.10.3-py39hecd8cb5_0 --> 4.14.0-py39hecd8cb5_0

Proceed ([y]/n)?

```

在终端输入 source activate test，进入 test 环境，在test环境安装 jupyter 包

```

zhanghanwen@zhanghanwendeMacBook-Air ~ % conda activate test
CommandNotFoundError: Your shell has not been properly configured to use 'conda activate'.
To initialize your shell, run

  $ conda init <SHELL_NAME>

Currently supported shells are:
- bash
- fish
- tcsh
- xonsh
- zsh
- powershell

See 'conda init --help' for more information and options.

IMPORTANT: You may need to close and restart your shell after running 'conda init'.

zhanghanwen@zhanghanwendeMacBook-Air ~ % source activate test
(test) zhanghanwen@zhanghanwendeMacBook-Air ~ % pip install jupyter -i
Usage:
  pip install [options] <requirement specifier> [package-index-options] ...
  pip install [options] -r <requirements file> [package-index-options] ...
  pip install [options] [-e] <vcs project url> ...
  pip install [options] [-e] <local project path> ...
  pip install [options] <archive url/path> ...

-i option requires 1 argument
(test) zhanghanwen@zhanghanwendeMacBook-Air ~ % pip install jupyter
Collecting jupyter
  Downloading jupyter-1.0.0-py2.py3-none-any.whl (2.7 kB)
Collecting ipywidgets
  Downloading ipywidgets-8.0.2-py3-none-any.whl (134 kB)

```

此时打开 jupyter notebook 可以看到：刚刚创建的 test 环境已经可以在 notebook 使用



使用 conda deactivate 退出 test 环境，输入 conda remove -n test --all，删除 test

```
[C 16:41:41.127 NotebookApp] 关闭确定
[I 16:41:41.130 NotebookApp] 关闭 0 服务
[I 16:41:41.130 NotebookApp] Shutting down 0 terminals
[(test) zhanghanwen@zhanghanwendeMacBook-Air ~ % source deactivate
DeprecationWarning: 'source deactivate' is deprecated. Use 'conda deactivate'.
|zhanghanwen@zhanghanwendeMacBook-Air ~ % conda remove -n test --all
Remove all packages in environment /Users/zhanghanwen/opt/anaconda3/envs/test:

## Package Plan ##

environment location: /Users/zhanghanwen/opt/anaconda3/envs/test

The following packages will be REMOVED:

ca-certificates-2022.07.19-hecd8cb5_0
certifi-2022.6.15-py39hecd8cb5_0
libcxx-14.0.6-h9765a3e_0
libffi-3.3-hb1e8313_2
ncurses-6.3-hca72ff7f_3
openssl-1.1.1q-hca72ff7f_0
pip-22.1.2-py39hecd8cb5_0
python-3.9.13-hdfd78df_1
readline-8.1.2-hca72ff7f_1
setuptools-63.4.1-py39hecd8cb5_0
sqlite-3.39.2-h707629a_0
tk-8.6.12-h5d9f67b_0
tzdata-2022c-h04d1e81_0
wheel-0.37.1-pyhd3eb1b0_0
xz-5.2.5-hca72ff7f_1
zlib-1.2.12-h4dc903c_3

Proceed ([y]/n)?
```

此时使用 conda env list 查看所有环境，已经没有 test 环境了，打开 jupyter notebook，也没有 test 环境，说明已经成功删除 test 环境

```
## Package Plan ##

environment location: /Users/zhanghanwen/opt/anaconda3/envs/test

The following packages will be REMOVED:

ca-certificates-2022.07.19-hecd8cb5_0
certifi-2022.6.15-py39hecd8cb5_0
libcxx-14.0.6-h9765a3e_0
libffi-3.3-hb1e8313_2
ncurses-6.3-hca72ff7f_3
openssl-1.1.1q-hca72ff7f_0
pip-22.1.2-py39hecd8cb5_0
python-3.9.13-hdfd78df_1
readline-8.1.2-hca72ff7f_1
setuptools-63.4.1-py39hecd8cb5_0
sqlite-3.39.2-h707629a_0
tk-8.6.12-h5d9f67b_0
tzdata-2022c-h04d1e81_0
wheel-0.37.1-pyhd3eb1b0_0
xz-5.2.5-hca72ff7f_1
zlib-1.2.12-h4dc903c_3

Proceed ([y]/n)? y

Preparing transaction: done
Verifying transaction: done
Executing transaction: done
[zhanghanwen@zhanghanwendeMacBook-Air ~ % conda env list
# conda environments:
#
base          /Users/zhanghanwen/opt/anaconda3
zhanghanwen@zhanghanwendeMacBook-Air ~ %]
```



- 运行所有 .ipynb 文件

Python-00 – Jupyter Notebook.pdf

Python-01 – Jupyter Notebook.pdf

Python-02 – Jupyter Notebook.pdf

Python-03 – Jupyter Notebook.pdf