1. Introduction

《Python programming》 / Lecturer：Zhiyi Luo (罗志一)

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计算机科学与技术学院

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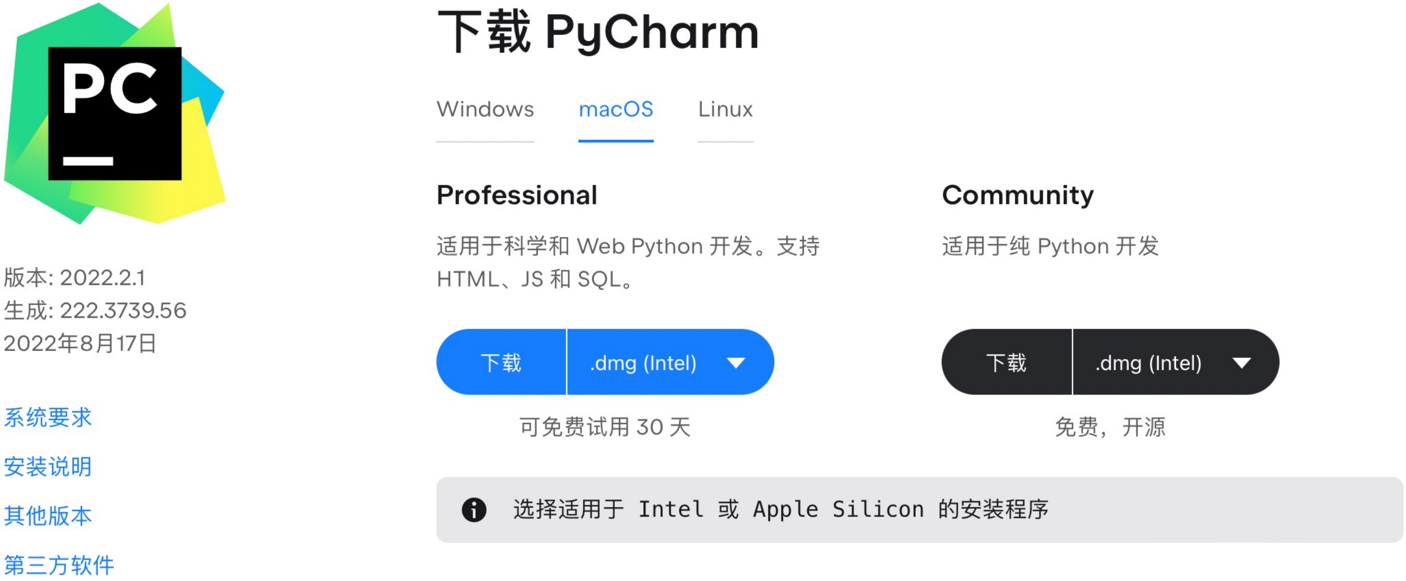
ZHEJIANG SCI-TECH UNIVERSITY

Overview

- Development Tools
- Environments Setup
- Let’s have a TRY!

Tools: Pycharm

- Download & Install 下载并安装Pycharm
  - https://www.jetbrains.com/zh-cn/pycharm/download/



版本: 2022.2.1
生成: 222.3739.56
2022年8月17日

系统要求

安装说明

其他版本

第三方软件

下载 PyCharm

Professional

适用于科学和 Web Python 开发。支持 HTML、JS 和 SQL。

可免费试用 30 天

Community

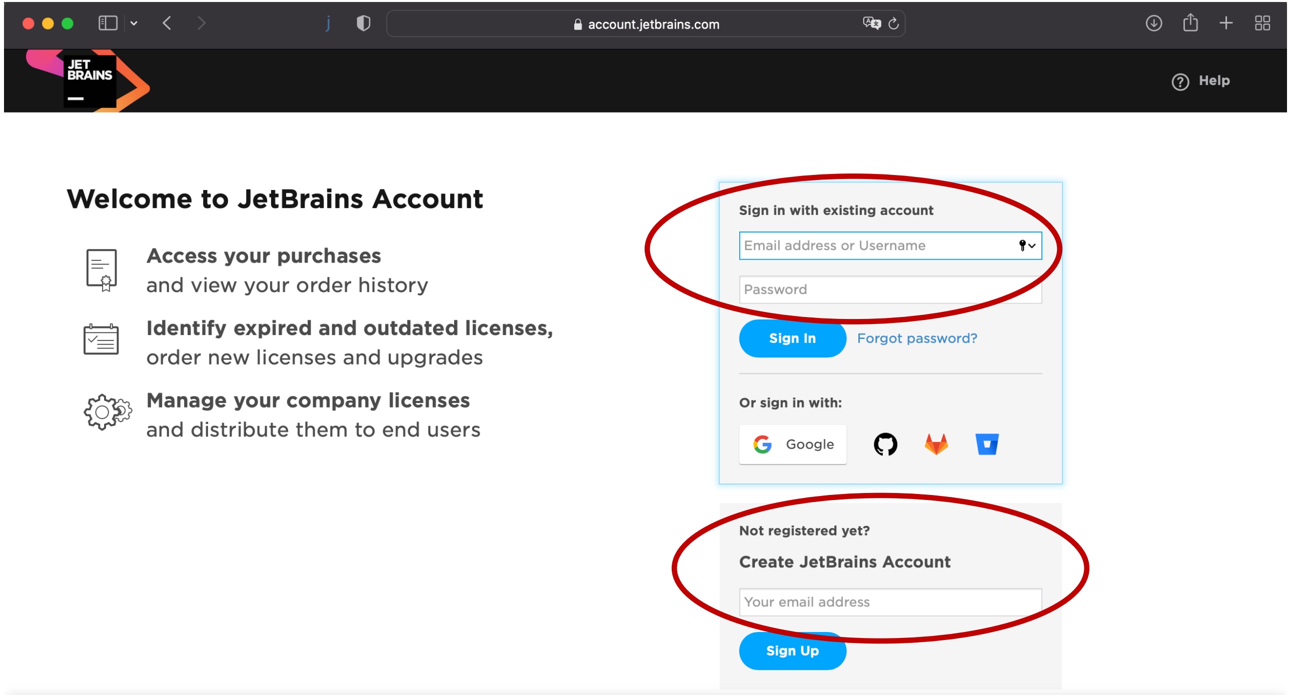
适用于纯 Python 开发

免费，开源

选择适用于 Intel 或 Apple Silicon 的安装程序

Tools：Pycharm

- 用学校邮箱注册JetBrains账户并登录



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Access your purchases
and view your order history

Identify expired and outdated licenses,
order new licenses and upgrades

Manage your company licenses
and distribute them to end users

Sign in with existing account

Email address or Username

Password

Or sign in with:

Not registered yet?

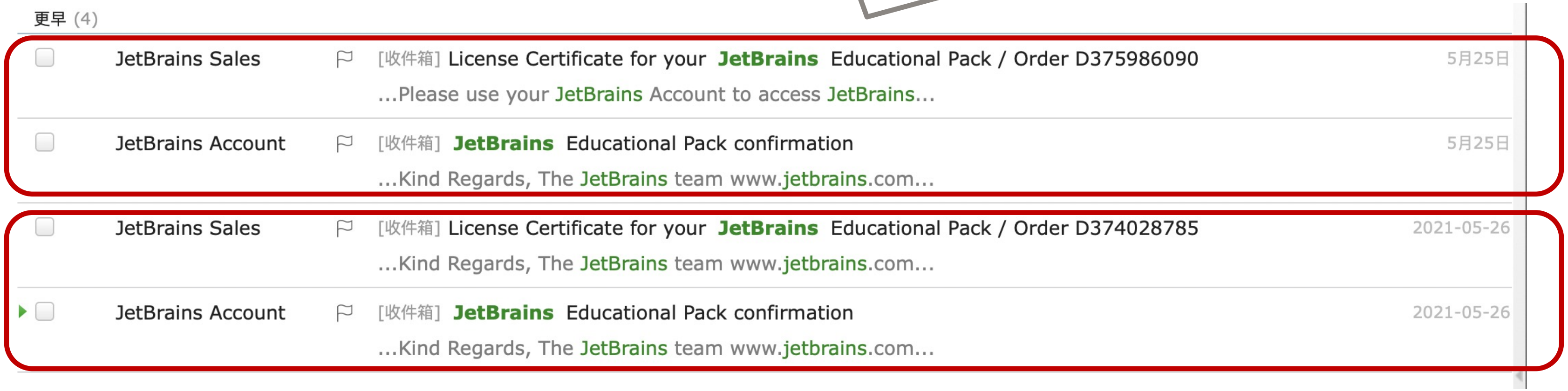
Create JetBrains Account

Your email address

Tools：Pycharm

- 申请免费的学生或教师license

2. 第二年license到期，申请新的license。



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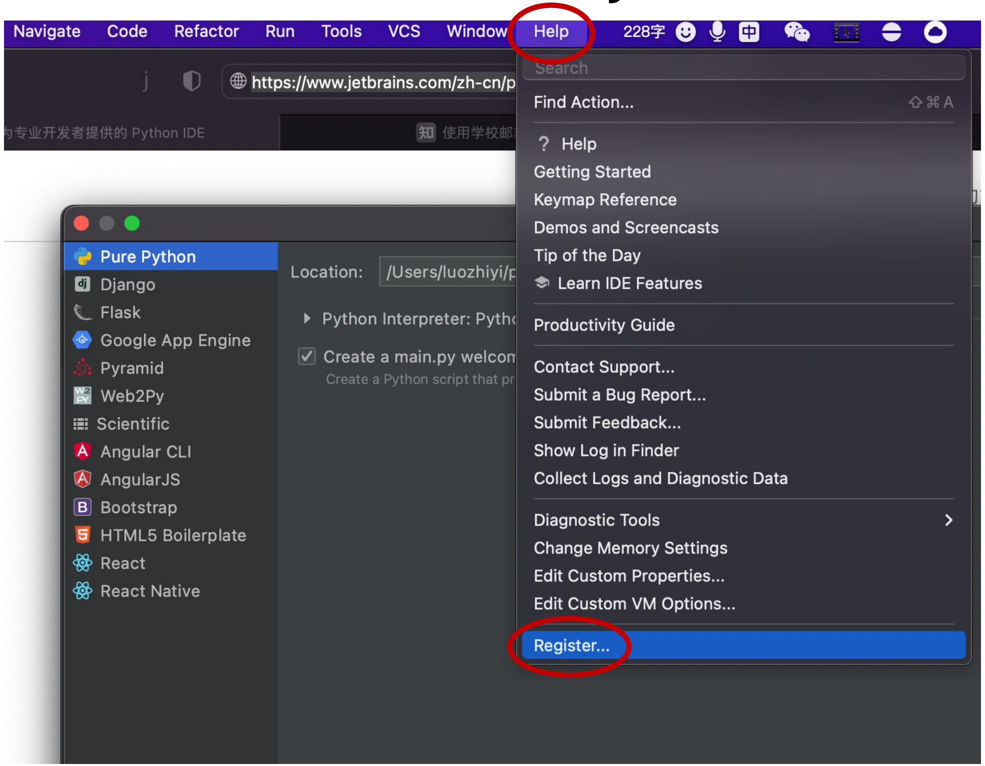
1. 首次申请license，有效期一年。

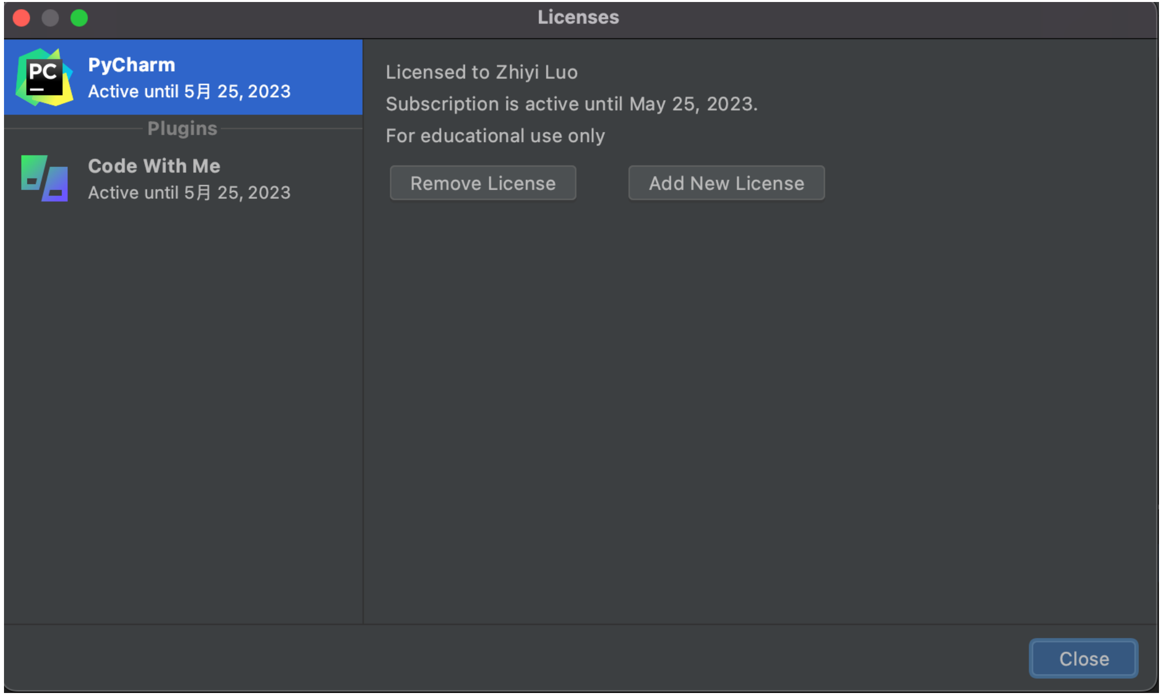
Tools：Pycharm

- 用申请到的license激活Pycharm



Tools：Pycharm

- 用申请到的license激活Pycharm



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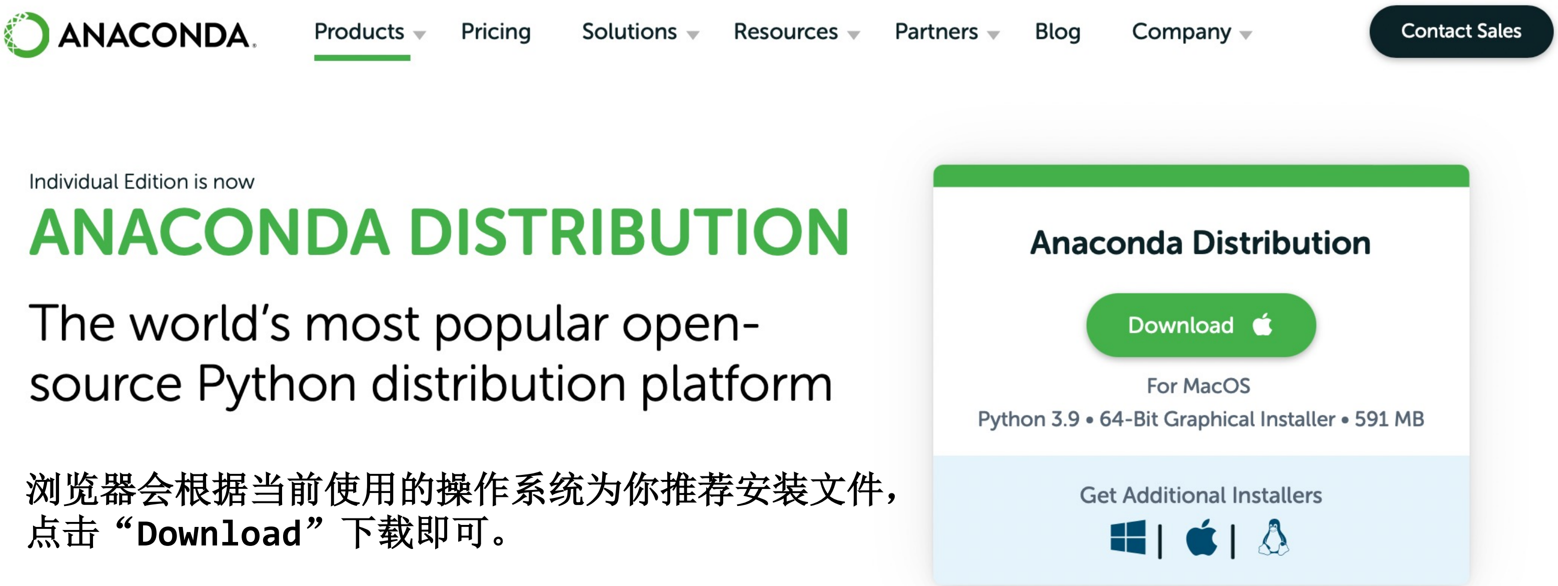
Subscription is active until May 25, 2023.

For educational use only

Environments: Anaconda

- Download Anaconda Installer
  - 官方下载链接：https://www.anaconda.com/products/distribution



Individual Edition is now

ANACONDA DISTRIBUTION

The world's most popular open-source Python distribution platform

Anaconda Distribution

For MacOS

Python 3.9 • 64-Bit Graphical Installer • 591 MB

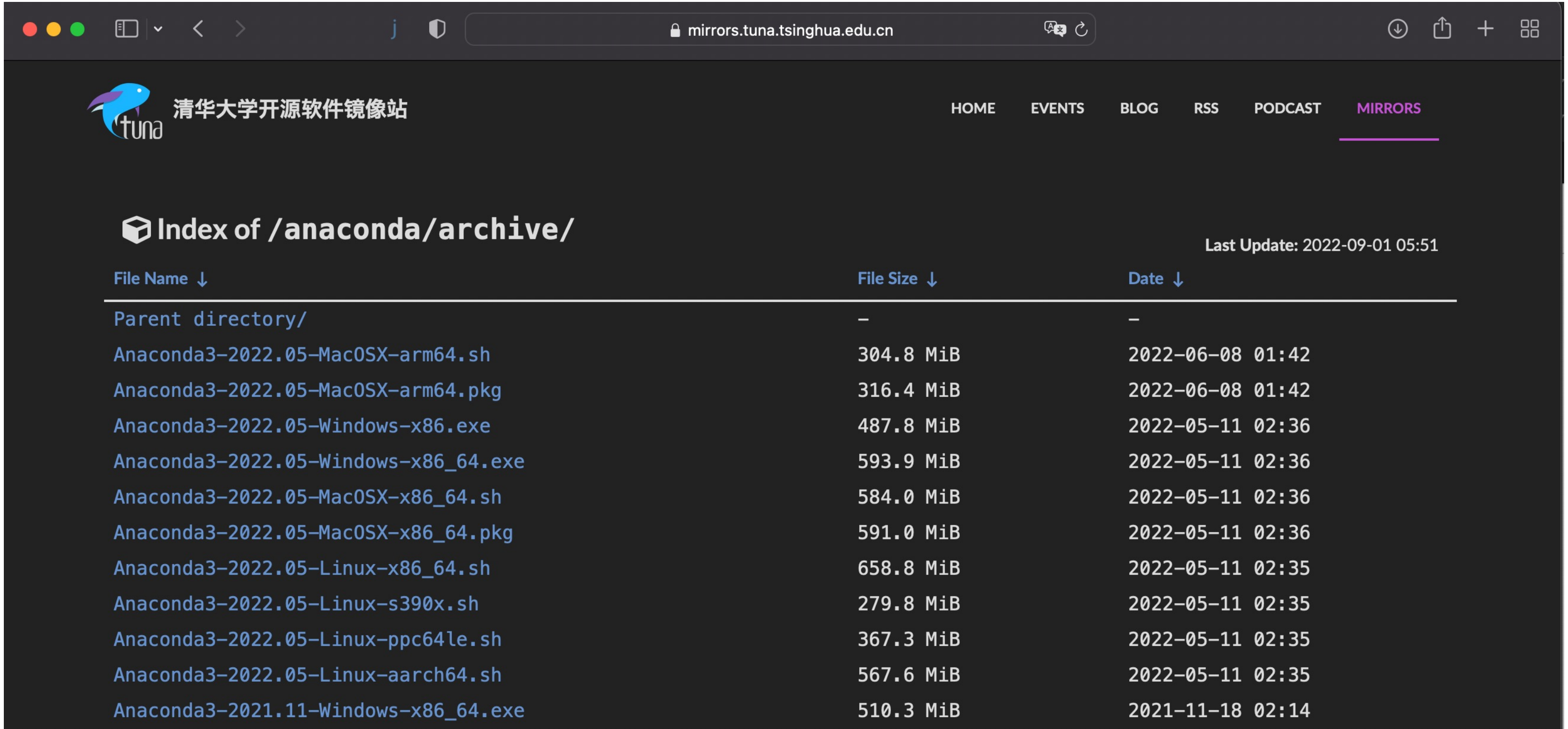
浏览器会根据当前使用的操作系统为你推荐安装文件，点击“Download”下载即可。

Environments: Anaconda

- 从清华大学镜像下载Anaconda
  - 如果安装包下载速度过慢，可以使用Anaconda国内源（例如：清华大学镜像）进行下载。
  - Anaconda清华源的下载列表链接为：https://mirrors.tuna.tsinghua.edu.cn/anaconda/archive/

Environments: Anaconda

- 从清华大学镜像下载Anaconda



Index of /anaconda/archive/

Last Update: 2022-09-01 05:51

File Name ↓	File Size ↓	Date ↓
Parent directory/	-	-
Anaconda3-2022.05-MacOSX-arm64.sh	304.8 MiB	2022-06-08 01:42
Anaconda3-2022.05-MacOSX-arm64.pkg	316.4 MiB	2022-06-08 01:42
Anaconda3-2022.05-Windows-x86.exe	487.8 MiB	2022-05-11 02:36
Anaconda3-2022.05-Windows-x86_64.exe	593.9 MiB	2022-05-11 02:36
Anaconda3-2022.05-MacOSX-x86_64.sh	584.0 MiB	2022-05-11 02:36
Anaconda3-2022.05-MacOSX-x86_64.pkg	591.0 MiB	2022-05-11 02:36
Anaconda3-2022.05-Linux-x86_64.sh	658.8 MiB	2022-05-11 02:35
Anaconda3-2022.05-Linux-s390x.sh	279.8 MiB	2022-05-11 02:35
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Anaconda3-2021.11-Windows-x86_64.exe	510.3 MiB	2021-11-18 02:14

Environments: Anaconda

- 从清华大学镜像下载Anaconda
  - 下载完成之后，双击安装包进行安装。

Environments: Anaconda

- 从清华大学镜像下载Anaconda
  - 使用帮助文档在：https://mirrors.tuna.tsinghua.edu.cn/help/anaconda/
    - 在用户目录下配置.condarc文件
    - macOS和Linux用户可直接在用户目录/home/username下创建 .condarc文件，并写入配置内容。
    - Windows用户无法直接创建名为.condarc的文件，可先执行conda config –set show_channel_urls yes命令生成该文件，再写入配置内容。

Environments: Anaconda

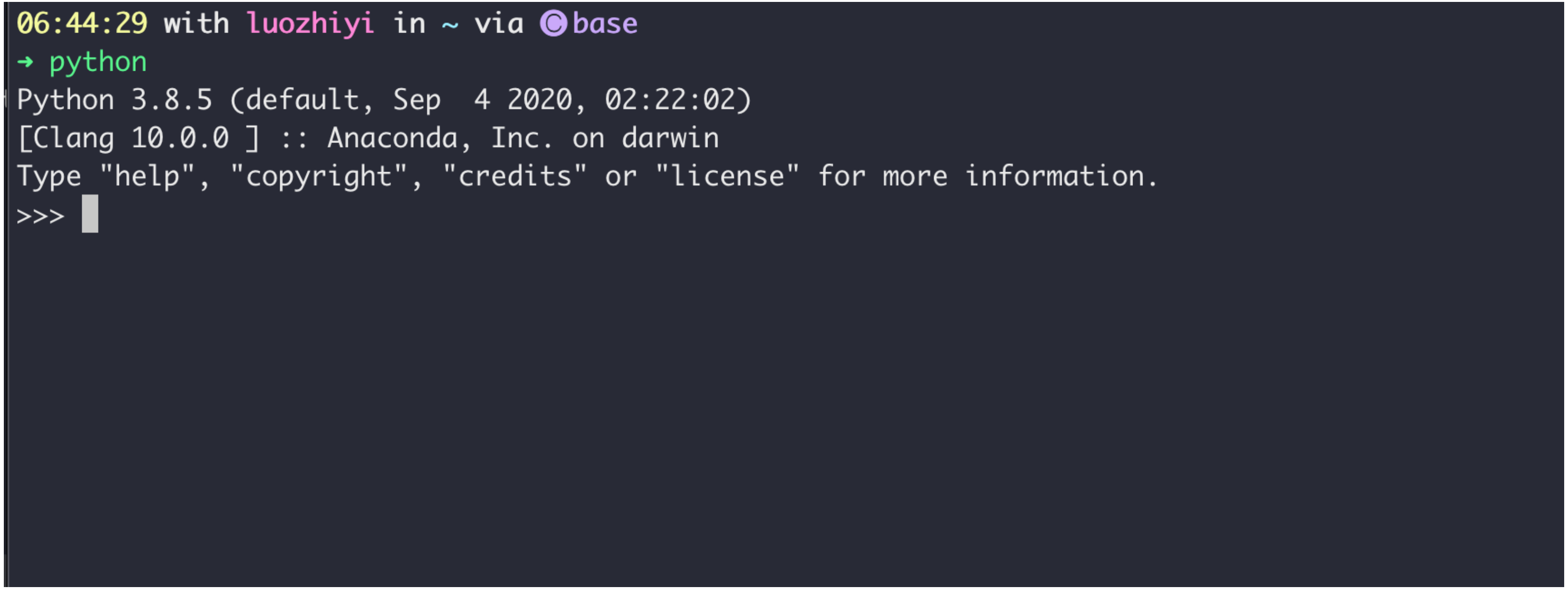
- 创建Python虚拟环境
  - conda create -n <环境名称>
  - 例如，可以使用如下命令将新建环境命名为pycourse，并指定该环境的Python版本为3.9：`conda create -n pycourse python=3.9`
- 查看Anaconda中的所有虚拟环境
  - conda info --envs
- 激活指定环境
  - conda activate <环境名称>
- 退出当前激活的环境
  - conda deactivate

如果.condarc中配置了清华源此处无需翻墙即可成功。

Let’s have a try!

Running Python

- Using the Interactive Interpreter



```
06:44:29 with luozhiyi in ~ via Ⓒbase
➜ python
Python 3.8.5 (default, Sep  4 2020, 02:22:02)
[Clang 10.0.0 ] :: Anaconda, Inc. on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> 
```

Running Python

- Use Python Files

make a Python program file and run it:

1. Open your text editor.
2. Type the line print(61).
3. Save this to a file called 61.py.
4. open a terminal window
5. Run your program by typing the following:

```
$ python 61.py
```

You should see a single line of output:61

Python as a calculator

First Case: Hello World!

```
print(‘Hello World’)
```

First Case: Hello World!

```
# Define a main() function that prints a little greeting.
def main():
    print(‘Hello World’)

main()
```

First Case: Hello World!

```
# Define a main() function that prints a little greeting.
def main():
    print(‘Hello World’)

main()
```

Indent: Four spaces

First Case: Hello World!

```python
# Define a main() function that prints a little greeting.
def main():
    print(‘Hello World’)

# This is the standard boilerplate that calls the main() function.
if __name__ == '__main__':
    main()
```

First Case: Hello World!

```python
import sys

# Define a main() function that prints a little greeting.
def main():
    # Get the name from the command line, using 'World' as a fallback.
    if len(sys.argv) >= 2:
        name = sys.argv[1]
    else:
        name = 'World'
    print('Hello', name)

# This is the standard boilerplate that calls the main() function.
if __name__ == '__main__':
    main()
```

First Case: Hello World!

```python
import sys

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    else:
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    print('Hello', name)

# This is the standard boilerplate that calls the main() function.
if __name__ == '__main__':
    main()
```

How many spaces are there?