

Git简介 & 软件的安装与配置

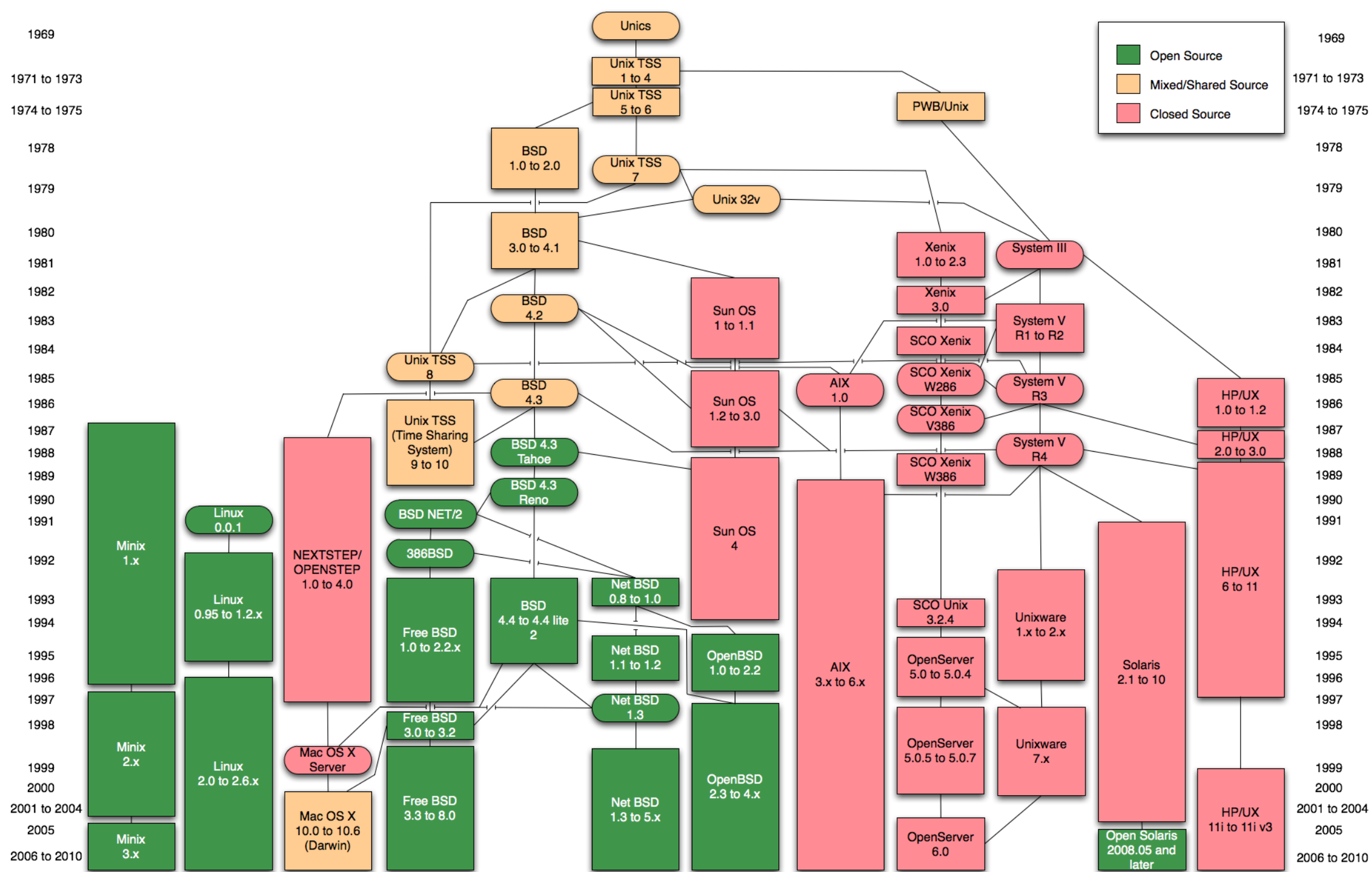
目录

- 一. 计算机操作系统简介(10min)
- 二. Git与Github的简单使用(60min)
- 三. Anaconda的安装与配置(5min)
- 四. Visual Studio Code的安装与配置(5min)
- 五. Python程序的两种运行模式(10min)

一. 计算机操作系统简介

三大操作系统

- Windows
- UNIX
- Linux



Shell

- Bash
- Cmd
- PowerShell

最常用的4个Bash命令

- cd
- pwd
- ls/dir
- clear/cls

二. Git与Github的简单使用

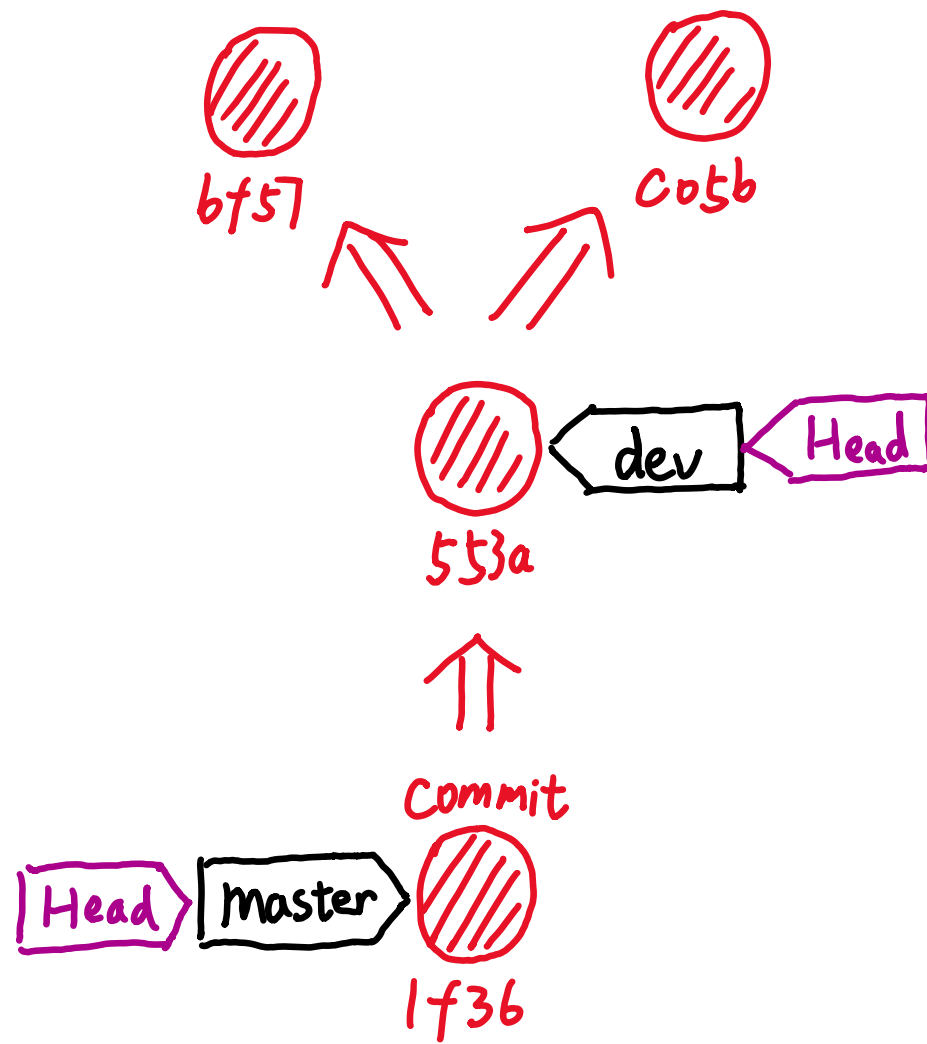


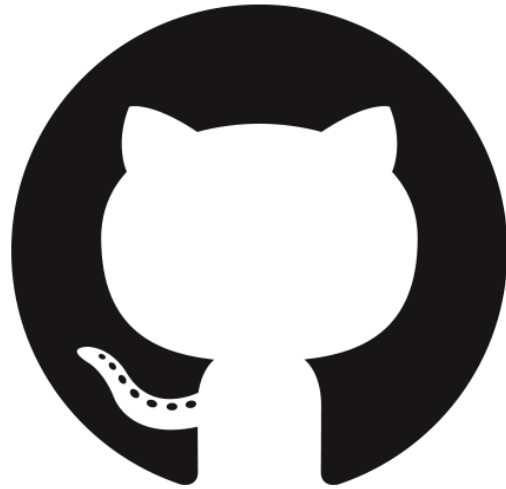
Git is one of the most popular version control system(VCS).

It is a mature, actively maintained, open source project
compatible with many operating systems and IDEs

Git常用命令

- git init
- git status
- git add .
- git commit -m [备注]
- git log
- git branch
- git branch [分支名]
- git checkout [分支名/SHA1]





The world's leading software development platform.
GitHub is an American company that provides hosting for
software development version control using Git.

Git常用命令(续)

- `git clone [url]`
- `git pull origin master`
- `git push origin master`

Github特色功能

- Fork
- Pull Request
- Issue

三. Anaconda的安装与配置



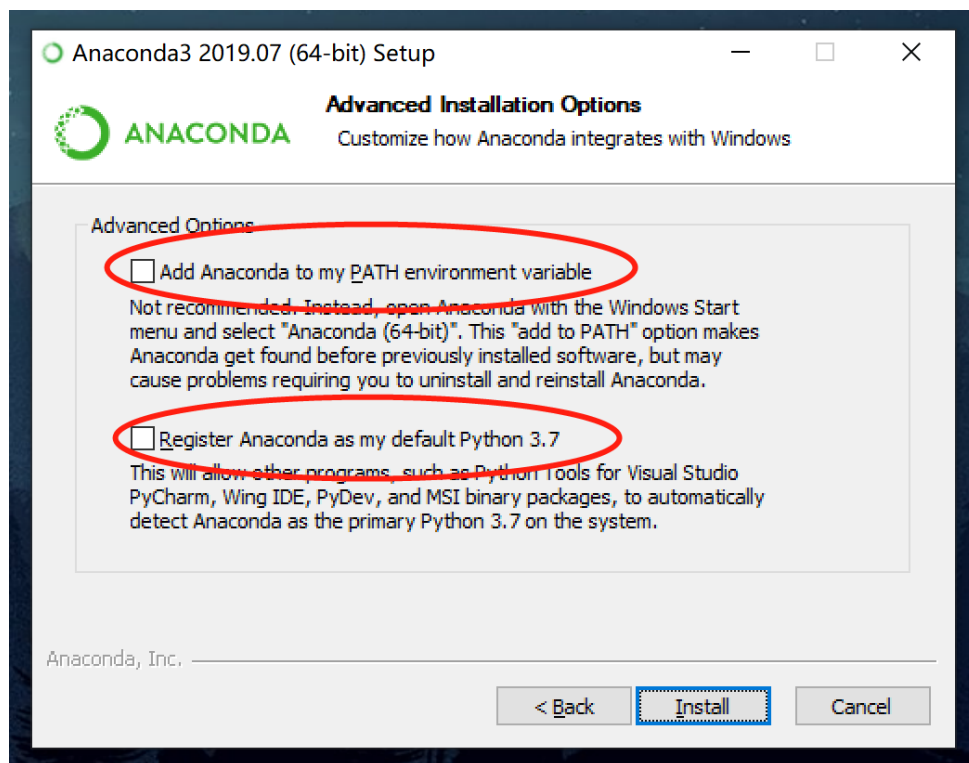
Anaconda

=

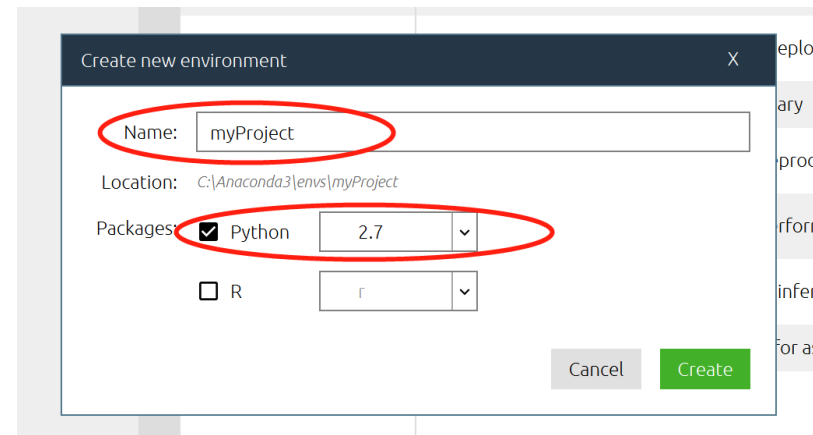
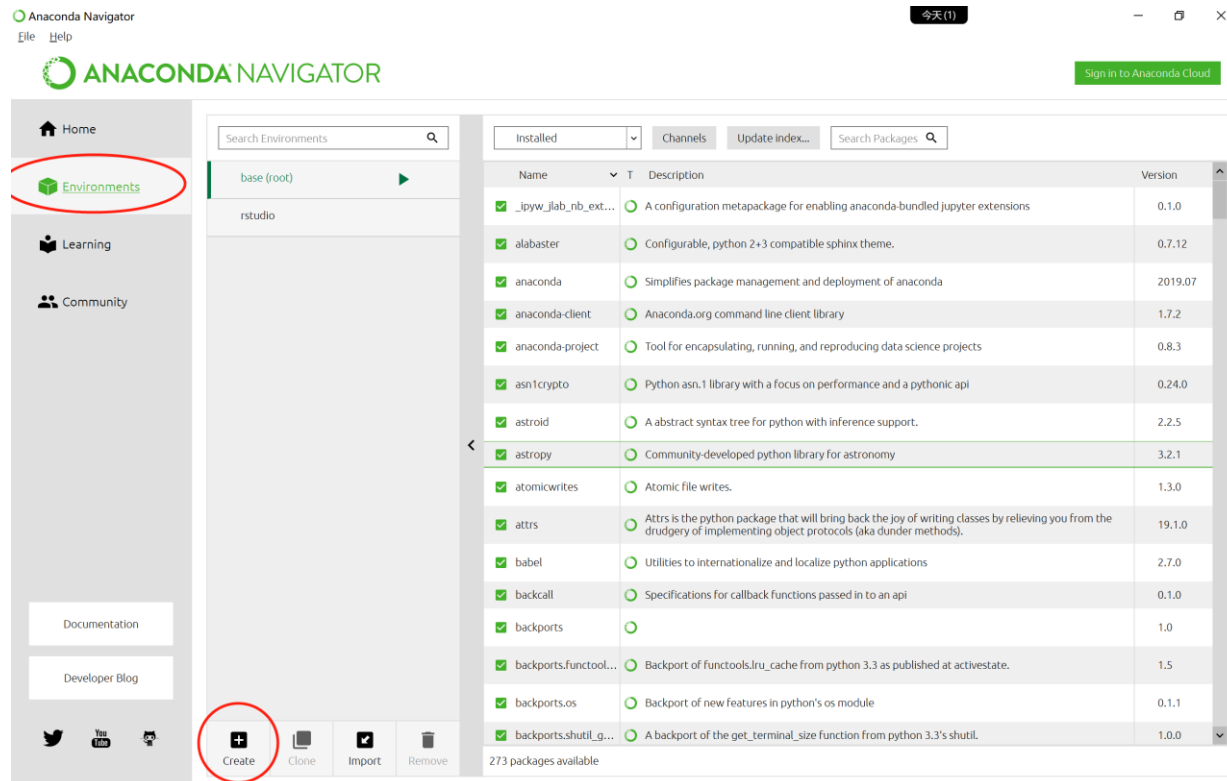
**Python + conda + a lot of data science packages + tools like
Jupyter Notebook**

安装过程中的注意事项

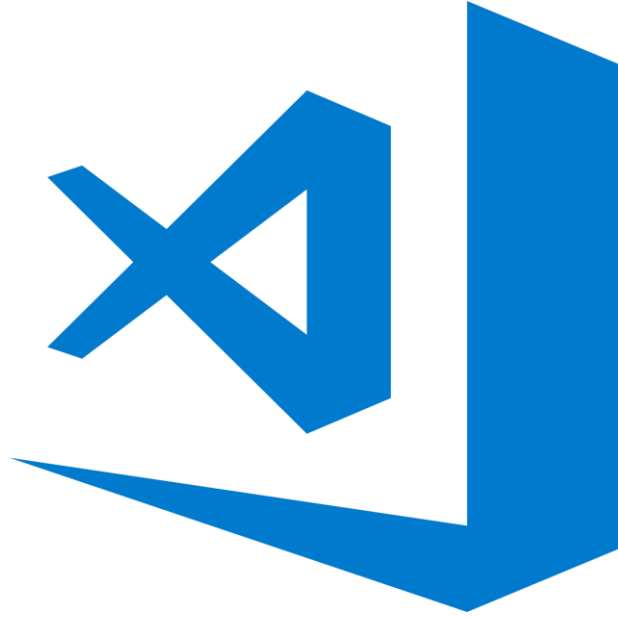
- 第一，安装路径最好全部都是英文；
- 第二，到下面这一步时，两个都打勾：



环境管理

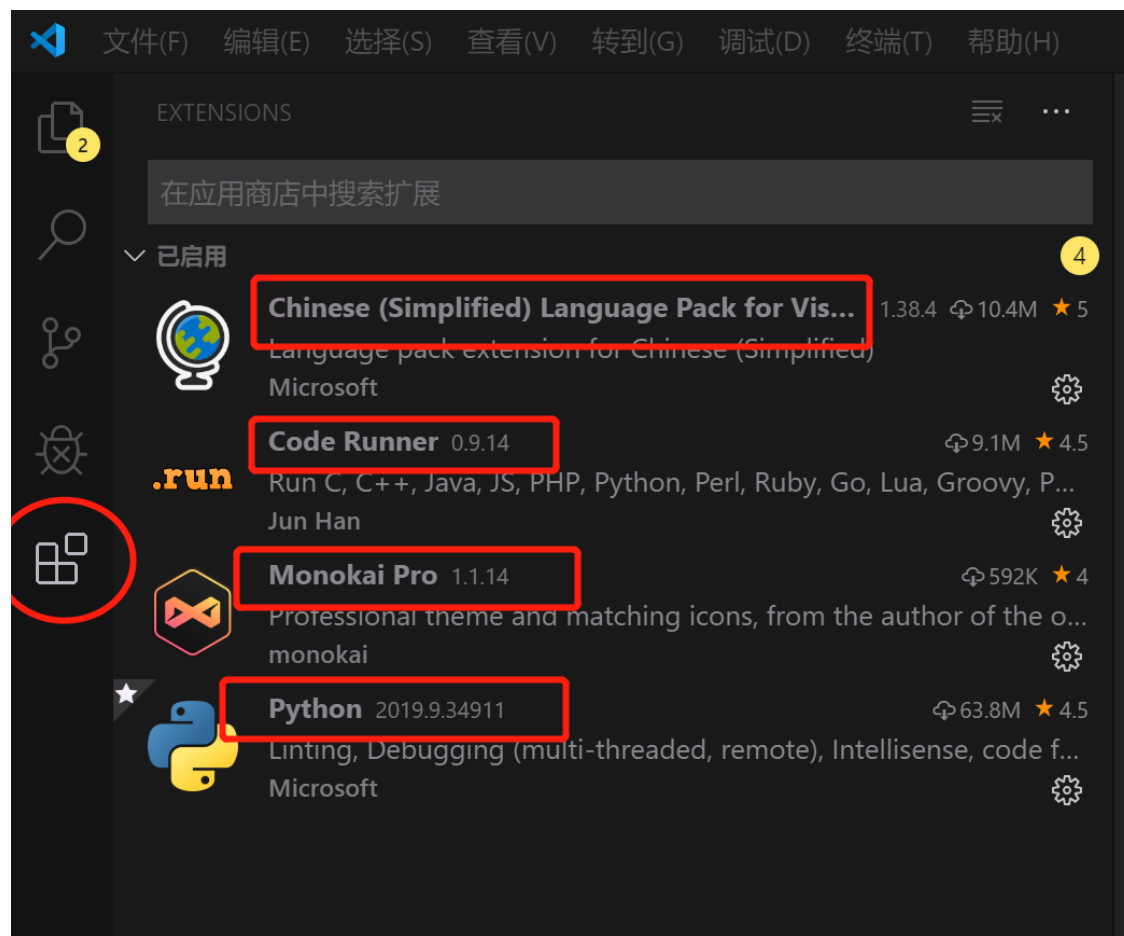


四. Visual Studio Code的 安装与配置



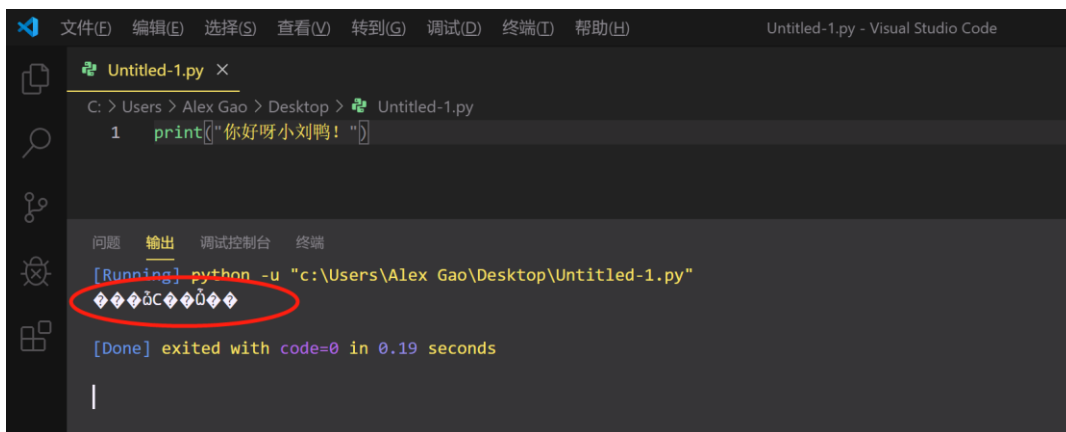
Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux.

常用插件

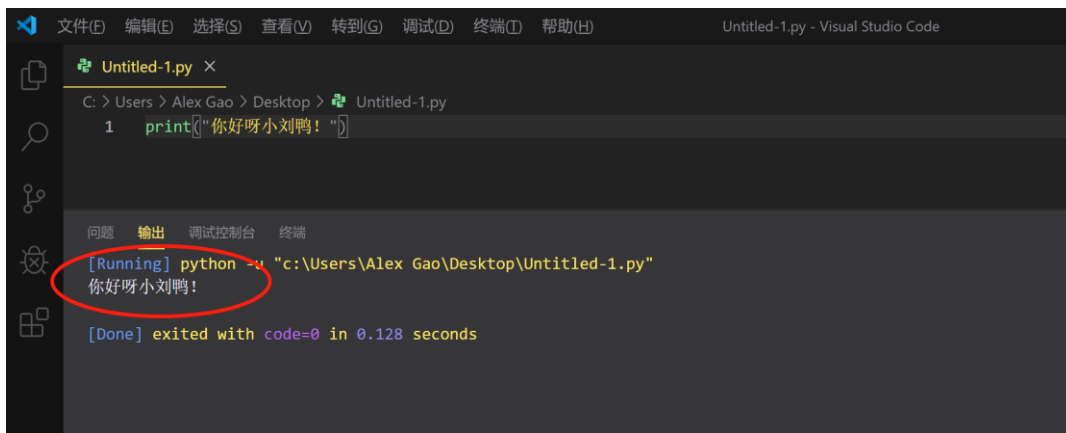


解决输出为中文乱码

- 添加系统变量: PYTHONIOENCODING=UTF8



This screenshot shows the Visual Studio Code interface with a Python file named 'Untitled-1.py' open. The file contains a single line of code: `print("你好呀小刘鸭!")`. The terminal output shows the command `[Running] python -u "c:\Users\Alex Gao\Desktop\Untitled-1.py"` being executed. The output of the program is displayed as garbled Chinese characters: `你你好呀小刘鸭!`, which is circled in red. Below the output, the terminal shows `[Done] exited with code=0 in 0.19 seconds`.

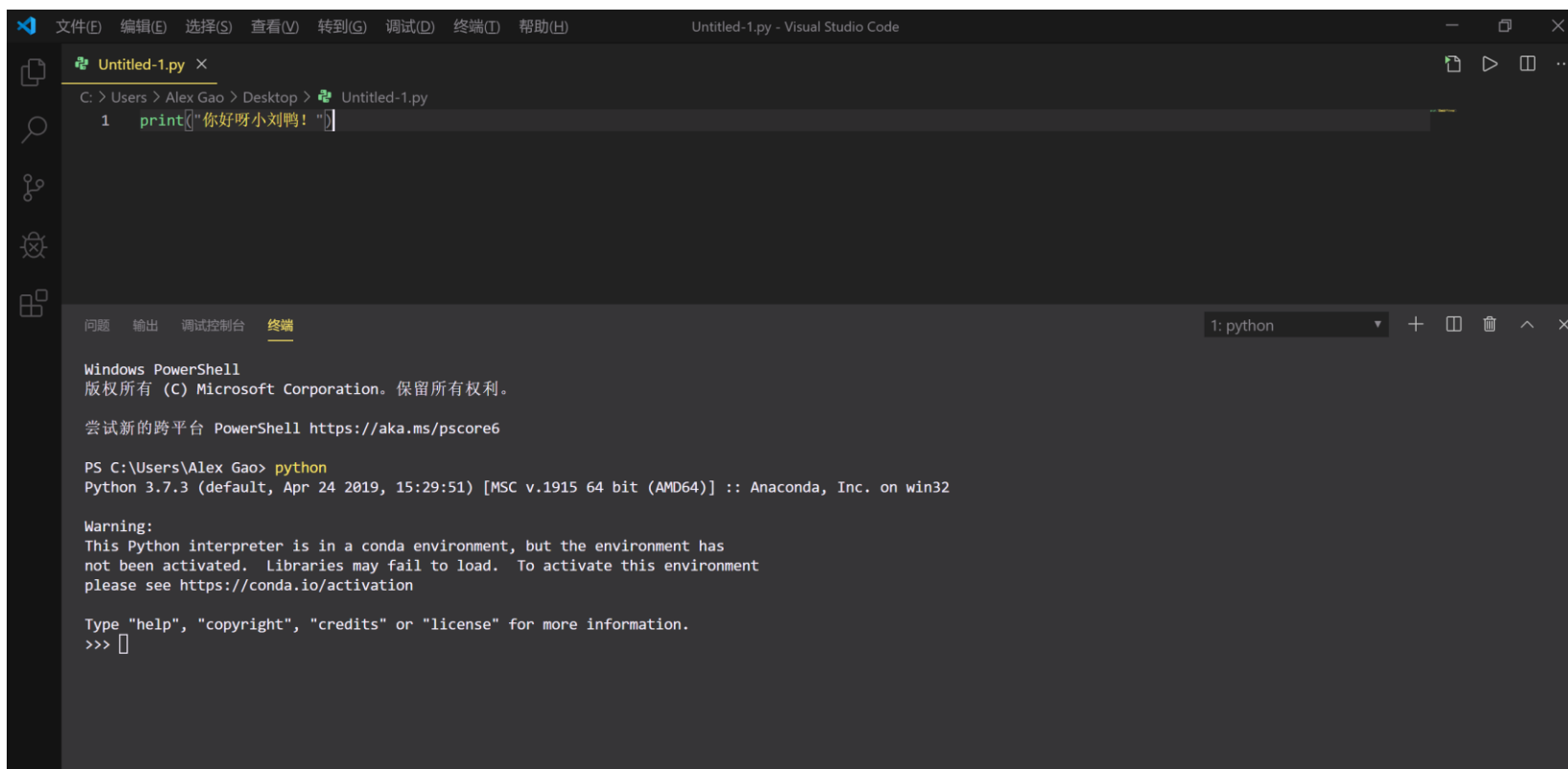


This screenshot shows the same Visual Studio Code interface as the previous one, but with the system variable `PYTHONIOENCODING=UTF8` added. The terminal output now shows the correct Chinese characters: `你好呀小刘鸭!`, which is circled in red. The terminal also shows `[Done] exited with code=0 in 0.128 seconds`.

五. Python程序的两种运行方式

两种方式

- 交互式环境——退出消失，熟悉语法；
- 脚本：保存为文件运行——持久化，复杂逻辑。



The screenshot shows the Visual Studio Code interface. The editor window displays a file named 'Untitled-1.py' with the following content:

```
1 print("你好呀小刘鸭！")
```

The terminal window at the bottom shows the execution of the script using the 'python' command. The output includes the Windows PowerShell prompt, the command 'python', and the resulting Python 3.7.3 prompt. A warning message is also displayed, indicating that the Python interpreter is in a conda environment but not activated.

```
Windows PowerShell
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尝试新的跨平台 PowerShell https://aka.ms/pscore6

PS C:\Users\Alex Gao> python
Python 3.7.3 (default, Apr 24 2019, 15:29:51) [MSC v.1915 64 bit (AMD64)] :: Anaconda, Inc. on win32

Warning:
This Python interpreter is in a conda environment, but the environment has
not been activated. Libraries may fail to load. To activate this environment
please see https://conda.io/activation

Type "help", "copyright", "credits" or "license" for more information.
>>>
```


参考资料

- How Git Works, by Paolo Perrotta
 - <https://app.pluralsight.com/library/courses/how-git-works/table-of-contents>
- Git & Github for Poets, by DANIEL SHIFFMAN
 - <https://www.bilibili.com/video/av4857819?from=search&seid=5402638418024823626>
- Github guides
 - <https://guides.github.com/activities/hello-world/>