# Shell脚本语言

介绍Shell脚本编写 介绍Shell工具

### **Shell Scripting**

- Optimized for performing shell-related tasks like:
  - Creating command pipelines
  - Saving results into files
  - Reading from standard input
- Bourne-Again Shell (BASH) is the most common scripting
- SH, CSH, ZSH, FISH...



- Variable
- Control flow
- Syntax

### Example

• 给定一批文件,寻找其中 是否包含foobar字符串

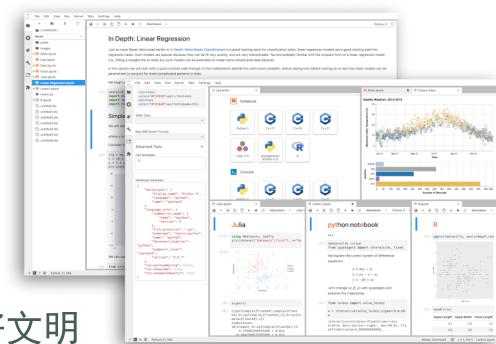
```
#!/bin/bash
echo "Starting program at $(date)" # date会被替换成日期和时间
echo "Running program $0 with $# arguments with pid $$"
for file in "$@"; do
   grep foobar "$file" > /dev/null 2> /dev/null
   # 如果模式没有找到,则grep退出状态为 1
   # 我们将标准输出流和标准错误流重定向到Null, 因为我们并不关心这些信息
   if [[ $? -ne 0 ]]; then
       echo "File $file does not have any foobar, adding one"
       echo "# foobar" >> "$file"
   fi
done
```

### **Shell Tools**

- man
- find
- 3 useful utilities: grep, awk, sed
- history
- Third-patry tools: tldr, fd, locate, rg, fasd, autojump, tree...
- <u>Linux三大利器grep</u>, <u>sed</u>, <u>awk</u> <u>SegmentFault</u> 思否

# 今日加餐:草履虫都能看懂的Python环境部署

- Python也是一种脚本语言!
- 脚本语言的特性:
  - 解释执行
  - 快速构建
  - 。任务自动化支持
- 需要安装解释器来执行
- Anaconda比原生Python有素质,是好文明
- 还在用Python自带的IDLE编辑器? 这个版本已经是JupyterLab强势了



## 小练习

- 见Lab2.md
- 浏览A Byte of Python, 了解Python语法功能

# 预祝新年快乐!

新的一年,卷中作乐!