

## 第二周学习笔记

### 1. 学习使用 ls 命令

目录树：文件系统资源

```
MINGW64:/c/Users/wdhw1
wdhw1@wxc MINGW64 ~
$ ls
'《Python商业数据分析》 王晨潇期末分析报告.ipynb'
'《Python商业数据分析》期末分析报告.ipynb'
「开始」菜单@
ado/
adult.csv
anaconda3/
AppData/
'Application Data'@
Bitcoin_2010_1_1-2024_12_19_historical_data_coinmarketcap.csv
calendar_effect_中证1000.xlsx
city_level.csv
Contacts/
Cookies@
Desktop/
Documents/
Downloads/
earthquakes.csv
employees.csv
Favorites/
fb_stock_prices_2018.csv
```

```
MINGW64:/c/Users/wdhw1/Dc
wdhw1@wxc MINGW64 ~/Documents
$ ls
360截图/
CADReader/
'ChaoXingStudyNew Files'/
ChromeSetup.exe*
Concepts/
CVCORE/
desktop.ini
Downloads/
'EViews Addins'/
'EViews Example Files.lnk'*
'EViews User Objects'/
KingsoftData/
'League of Legends'/
'My Music'@
'My Pictures'@
'My Videos'@
'OneNote 笔记本'/
'Python Scripts'/
temp/
TencentMeeting/
'WeChat Files'/
WmAudio/
'Wondershare DemoCreatorCN'/
'WPS Cloud Files'/
WPSDrive/
心有猛虎心系蔷薇.jpg
员工家访情况记录表.docx
'自定义 Office 模板'/

wdhw1@wxc MINGW64 ~/Documents
$ ls
360截图/
abc.txt
CADReader/
'My Pictures'@
'My Videos'@
'OneNote 笔记本'/
```

```
MINGW64: c:/Users/wdhw1/Dc
wdhw1@wcx MINGW64 ~/Desktop
$ cat abc.txt
hellow world

wdhw1@wcx MINGW64 ~/Desktop
$ cat abc.txt
hellow world

wdhw1@wcx MINGW64 ~/Desktop
$ cat abc.txt
hellow world
goodbye
wdhw1@wcx MINGW64 ~/Desktop
$ cd ../Documents/

wdhw1@wcx MINGW64 ~/Documents
$ ls
360截图/          'My Pictures'@
CADReader/        'My Videos'@
'ChaoXingStudyNew Files'/'OneNote 笔记本'/
ChromeSetup.exe*  'Python Scripts'/'
Concepts/         temp/
```

根目录: /

```
wdhw1@wcx MINGW64 ~/Documents
$ cat abc
cat: abc: No such file or directory

wdhw1@wcx MINGW64 ~/Documents
$ pwd
/c/Users/wdhw1/Documents

wdhw1@wcx MINGW64 ~/Documents
$ cd /

wdhw1@wcx MINGW64 /
$ ls
bin/  etc/  LICENSE.txt  ReleaseNotes.html  unins000.exe*
cmd/  git-bash.exe*  mingw64/  tmp/  unins000.msg
dev/  git-cmd.exe*  proc/  unins000.dat  usr/

wdhw1@wcx MINGW64 /
$
```

路径: 两种写法: 绝对路径、相对路径, 如 `abc.txt` 就是相对路径, 而从目录树的根目录开始写的如 `/c/Users/qiang/Desktop/abc.txt` 就是绝对路径

`.` 代表上一级文件夹

Unix 路径用斜杠做分隔, 而 Windows 用的反斜杠, Windows 从 `c:` 开始浏览器中是斜杠, 运用互联网的标准, 而互联网用的是 unix 的

Man ls 手册

../上一级

Ls option.... file....

常用的-l drwxr 读写执行 ls-ash 排序-alhS 最近修改-alht

使用 cp 命令复制文件/文件夹，使用 mv 命令移动 (重命名) 文件/文件夹：

```
wdhwl@wcx MINGW64 ~/Desktop
$ cat abc.txt
aaabbbccc

wdhwl@wcx MINGW64 ~/Desktop
$ cp abc.txt ../Downloads/

wdhwl@wcx MINGW64 ~/Desktop
$ cp abc.txt ../Downloads/xyz.txt

wdhwl@wcx MINGW64 ~/Desktop
$ ls -l
total 2276424
-rw-r--r-- 1 wdhwl 197609 162 11月 22 2023 '~$mpany valuation analysis report on Tencent.doc'
drwxr-xr-x 1 wdhwl 197609 0 12月 19 17:26 1王晨潇32022110035/
-rw-r--r-- 1 wdhwl 197609 1515099 12月 19 17:26 1王晨潇32022110035.zip
-rw-r--r-- 1 wdhwl 197609 511086 10月 25 11:19 '2022-jcf-Natural Disasters Risk Salience and Corpora
te ESG Disclosure_1_15_translate_20241017211203.docx'
-rw-r--r-- 1 wdhwl 197609 609495 10月 17 20:55 '2022-jcf-Natural Disasters Risk Salience and Corpora
te ESG Disclosure_1_15_translate_20241017211203.pdf'
drwxr-xr-x 1 wdhwl 197609 0 12月 7 2023 '2023年下半年英语六级笔试准考证(110107200405202412)'/
-rw-r--r-- 1 wdhwl 197609 11744 12月 3 19:58 32022110035王晨潇--金工作业.docx
-rwxr-xr-x 1 wdhwl 197609 2017 3月 7 2023 360安全浏览器.lnk*
-rw-r--r-- 1 wdhwl 197609 10 3月 16 20:28 abc.txt
```

```
wdhwl@wcx MINGW64 ~/Desktop
$ ls -l store
total 0

wdhwl@wcx MINGW64 ~/Desktop
$ ls -l store
total 1
-rw-r--r-- 1 wdhwl 197609 10 3月 16 20:28 abc.txt

wdhwl@wcx MINGW64 ~/Desktop
$ cp store ../Downloads/
cp: -r not specified; omitting directory 'store'

wdhwl@wcx MINGW64 ~/Desktop
$ cp -r store ../Downloads/

wdhwl@wcx MINGW64 ~/Desktop
$ mv ../Downloads/xyz.txt ./

wdhwl@wcx MINGW64 ~/Desktop
$
```

使用 mkdir 命令创建一个名为 myproject 的新文件夹，然后从图形界面 (比如 Windows 的“文件资源管理器”、macOS 的“访达”) 复制粘贴某些文件/文件夹进去，用 ls 命令查看复制进去的文件/文件夹的大小和修改时间，最后用 rm 命令删除这些文件/文件夹

```
wdhwl@wcx MINGW64 ~/Desktop
$ ls -alh myproject/
total 32K
drwxr-xr-x 1 wdhwl 197609 0 3月 16 21:00 ./
drwxr-xr-x 1 wdhwl 197609 0 3月 16 21:00 ../
drwxr-xr-x 1 wdhwl 197609 0 3月 16 20:56 store/

wdhwl@wcx MINGW64 ~/Desktop
$ rm abc.txt

wdhwl@wcx MINGW64 ~/Desktop
$ rm -r store

wdhwl@wcx MINGW64 ~/Desktop
$
```

使用 `df` 命令查看磁盘剩余空间，使用 `du` 命令查看文件/文件夹占用的磁盘空间：

```
wdhwl@wcx MINGW64 ~/Desktop
$ df -h
Filesystem      Size  Used Avail Use% Mounted on
C:/Program Files/Git 474G 296G 179G 63% /

wdhwl@wcx MINGW64 ~/Desktop
$
```

某个文件夹 `du -d`

`du -s * | sort -nr > ~/report.txt`

这个命令的作用是列出当前目录下所有文件和目录的大小，以字节为单位（`-s` 选项），然后将结果按照数值从大到小排序（`sort -nr`），最后将结果重定向到用户主目录下的 `report.txt` 文件中。

在 `GitCode` 平台新建一个你个人的私密的代码仓库（非公开，别人看不到），clone 到本地，将一些你自己的工作文件（文本文件或二进制文件都可以）添加到仓库里，`push` 到平台上托管

```
wdhwl@wcx MINGW64 ~/Desktop/repo/mywork (main)
$ cp ~/.gitconfig ./

wdhwl@wcx MINGW64 ~/Desktop/repo/mywork (main)
$ ls -l
total 0

wdhwl@wcx MINGW64 ~/Desktop/repo/mywork (main)
$ ls -al
total 5
drwxr-xr-x 1 wdhwl 197609  0  3月 16 21:39 ./
drwxr-xr-x 1 wdhwl 197609  0  3月 16 21:28 ../
drwxr-xr-x 1 wdhwl 197609  0  3月 16 21:28 .git/
-rw-r--r-- 1 wdhwl 197609 182  3月 16 21:39 .gitconfig

wdhwl@wcx MINGW64 ~/Desktop/repo/mywork (main)
$ git status
On branch main

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .gitconfig

nothing added to commit but untracked files present (use "git add" to track)
```

```
wdhwl@wcx MINGW64 ~/Desktop/repo/mywork (main)
$ git add .
warning: in the working copy of '.gitconfig', LF will be replaced by CRLF the next time Git touches it

wdhwl@wcx MINGW64 ~/Desktop/repo/mywork (main)
$ git status
On branch main

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   .gitconfig

wdhwl@wcx MINGW64 ~/Desktop/repo/mywork (main)
$ git commit -m 'added a file for test'
[main (root-commit) 252f388] added a file for test
 1 file changed, 6 insertions(+)
 create mode 100644 .gitconfig

wdhwl@wcx MINGW64 ~/Desktop/repo/mywork (main)
$ git log
commit 252f388d96e52088c3d08631d1eda77858418ae9 (HEAD -> main)
Author: wolfxiao <wolfxiao@noreply.gitcode.com>
Date:   Sun Mar 16 21:42:32 2025 +0800

    added a file for test
```