第二周作业笔记

一、Is 命令及相关内容

ls 命令:显示的是当前工作目录下边的一个列表,显示一下这个文件夹里的内容蓝色是文件夹,白色是普通文件

```
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~

$ ls
「开始」菜单@
'3D Objects'/
ado/
ansel/
AppData/
'Application Data'@
Contacts/
Cookies@
Documents/
Downloads/
Favorites/
IntelGraphicsProfiles/
Links/
'Local Settings'@
MicrosoftEdgeBackups/
Music/
'My Documents'@
NetHood@
```

pwd 命令: present working directory 当前工作目录 cd/: 根目录,唯一

```
Zotero/
华为云盘/
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~
$ pwd
/c/Users/FAN0917
```

cd: change directory 改变目录 Tab 键自动填充

```
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~ $ cd Documents/

FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Documents $
```

cat: 展示文本内容

```
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Documents
$ ls
abc.txt WPSDrive/

FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Documents
$ cat abc.txt
hello hi
```

cd..: 上一级

```
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
$ cd ../Documents/
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Documents
$ ls
abc.txt WPSDrive/
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Documents
```

相对路径:相对于当前目录, eg. cat abc.txt 绝对路径: 从根目录开始, 可一直用 tab 填充

二、常用命令与大模型解释

```
cp 和 mv: 把文件/文件夹从"Downloads"复制/移动到"Documents"
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Documents
$ cd
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~
$ cd Downloads/
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
$ ls -l
total 2
-rw-r--- 1 FAN0917 197121 16 3月 14 19:53 abcd.txt
-rw-r--- 1 FAN0917 197121 282 11月 23 2022 desktop.ini
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
$ cat abcd.txt
hi hi hi haha
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads $ cp abcd.txt ../Documents/
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
$ cd
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~
$ cd Documents
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Documents
$ ls -l
total 2
-rw-r--r- 1 FAN0917 197121 8 3月 14 19:12 abc.txt
-rw-r--r- 1 FAN0917 197121 16 3月 14 20:20 abcd.txt
drwxr-xr-x 1 FAN0917 197121 0 9月 19 11:22 WPSDrive/
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Documents
$
 FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
 $ cp -r store ../Documents/
 FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
 $ mv ../Documents/abcd.txt ./
mkdir: make directory 创建文件夹
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
$ mkdir myproject
 FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
```

rm -rf: 删除文件/文件夹

```
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
$ rm -rf store
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
$ rm -rf abcd.txt
```

```
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads

$ df

Filesystem 1K-blocks Used

D:/GQ/Git 401945596
                         1K-blocks Used Available Use% Mounted on 401945596 307521040 94424556 77% / 83886076 68713680 15172396 82% /c
  FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/Downloads
 $ df -h
Filesystem
                           Size Used Avail Use% Mounted on
                                               91G 77% /
15G 82% /c
 D:/GQ/Git
                           384G
                                     294G
                             80G
```

du: disk used 查看文件/文件夹占用的磁盘空间

```
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/ado
$ du
364
         ./plus/a
252
         ./plus/c
32
         ./plus/d
756
192
         ./plus/e
         ./plus/f
         ./plus/g
./plus/i
16
1308
         ./plus/j
./plus/l
32
1236
         ./plus/m
60
346
         ./plus/o
136
         ./plus/p
880
         ./plus/r
         ./plus/s
36
         ./plus/u
./plus/v
5
40
16
         ./plus/w
152
         ./plus/x
258
         ./plus/_
6185
         ./plus
6185
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/ado
$ du -d 1
6185
         ./plus
6185
```

解释此条 bash 命令: du -s * | sort -nr > ~/report.txt

1. du -s *

- du 命令: du 是 "disk usage" 的缩写,用于估算文件或目录的磁盘使用量。
- -s 选项: -s 表示 "summarize",即只显示每个参数的总计大小,而不显示其子目录或文件的详细信息。
- * 通配符: * 是一个通配符, 代表当前目录下的所有文件和目录。

所以, du -s * 的作用是统计当前目录下每个文件和目录所占用的磁盘空间的总计大小, 并将结果输出。

2. sort -nr

- sort 命令: sort 命令用于对文本行进行排序。
- -n 选项: -n 表示按照数值大小进行排序,而不是按照字母顺序排序。
- - r 选项: r 表示以逆序 (降序)排列,即从大到小排序。

sort -nr 会将前面 du -s * 输出的结果按照磁盘使用量的数值大小进行降序排序。

3. > ~/report.txt

- > 重定向符号:在 Bash 中, > 是输出重定向符号,它会将前面命令的输出结果覆盖写入到指定的文件中。如果文件不存在,则会创建该文件;如果文件已存在,则会清空文件原有内容并写入新的内容。
- ~/report.txt: ~ 代表用户的主目录, ~/report.txt 表示用户主目录下的 report.txt 文件。

因此,> ~/report.txt 的作用是将前面 du -s * | \checkmark -nr 命令组合输出的结果覆盖写入到用户主目录下的 report.txt 文件中。

三、用私密仓库托管自己的文件

创建仓库



复制一个文件到我的仓库

```
917@LAPTOP-7PDVKG40 MINGW64 ~/repo
 AN0917@LAPTOP-7PDVKG40 MINGW64 ~/repo/mywork (main)
$ ls -l
total 0
FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/repo/mywork (main)
$ cp ~/Documents/abc.txt ./
 AN0917@LAPTOP-7PDVKG40 MINGW64 ~/repo/mywork (main)
$ ls -al
total 5
drwxr-xr-x 1 FAN0917 197121 0 3月 14 21:03 ./
drwxr-xr-x 1 FAN0917 197121 0 3月 14 20:58 ../
drwxr-xr-x 1 FAN0917 197121 0 3月 14 20:58 .git/
-rw-r--r- 1 FAN0917 197121 8 3月 14 21:03 abc.txt
 FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/repo/mywork (main)
$ git status
 )n branch main
No commits yet
Untracked files:
(use "git add <file>..." to include in what will be committed)
nothing added to commit but untracked files present (use "git add" to track)
 FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/repo/mywork (main)
$ git add .
 FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/repo/mywork (main)
$ git status
On branch main
No commits yet
Changes to be committed:
   (use "git rm --cached <file>..." to unstage)
 FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/repo/mywork (main) $ git commit -m 'added some files for test'
[main (root-commit) ef4415a] added some files for test
1 file changed, 1 insertion(+)
create mode 100644 abc.txt
 FAN0917@LAPTOP-7PDVKG40 MINGW64 ~/repo/mywork (main)
$ git log
commit ef4415a663c7a479ef1d6db5be6f778174039b82 (HEAD -> main)
Author: jiemoduner <jiemoduner@noreply.gitcode.com>
Date: Fri Mar 14 21:08:37 2025 +0800
      added some files for test
  AN0917@LAPTOP-7PDVKG40 MINGW64 ~/repo/mywork (main)
FANO9170LAPTOP-7PDVKG40 MINGW64 ~/repo/mywork (main)

§ git push
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 230 bytes | 46.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Start Git Hooks Checking
To gitcode.com:jiemoduner/mywork.git

* [new branch] main -> main
  ijiemoduner/mywork 🖰
                                                 Q 按下 / 快速开启搜索
  ① jiemoduner added some files for test ef4415a6 │ 的建于 5 分钟前 │ ⑤ 历史提交
            最后提交记录
                                                                              最后更新时间
                        added some files for test
```