OS2021_Project1.Shell

###

yeeshell.c

main function and function definition

yeeshell.h

function declaration and macro definition

###

1. Deployment

Pull from my shuishan git.

```
git clone root@gitea.shuishan.net.cn:10195501441/OS2021_Project1.Shell.git
```

In the **MINIX3** environment, use clang to compile the program.

```
clang yeeshell.c -o yeeshell
```

Run yeeshell.

```
./yeeshell
```

2. Test Case

(1) `cd /your/path`

```
[root@yeeshell /root/OS2021_Project1.Shell]# cd /root
[root@yeeshell /root]#
```

(2) `ls -a -l`

```
[root@yeeshell /root]# ls -a -l
total 48
drwxr-xr-x   4 root   operator    704 Mar 18 18:06 .
drwxr-xr-x  17 root   operator   1408 Mar 16 10:24 ..
-rw-r--r--   1 root   operator     44 Sep 14  2014 .exrc
-rw-r--r--   1 root   operator    605 Sep 14  2014 .profile
drwx------   2 root   operator    384 Mar 16 10:15 .ssh
drwxr-xr-x   4 root   operator    640 Mar 18 18:06 OS2021_Project1.Shell
```

(3) `ls -a -l > result.txt`

```
[root@yeeshell /root]# ls -a -l > result.txt
[root@yeeshell /root]# cat result.txt
total 48
drwxr-xr-x    4 root    operator    704 Mar 19 09:22 .
drwxr-xr-x   17 root    operator   1408 Mar 16 10:24 ..
-rw-r--r--    1 root    operator     44 Sep 14  2014 .exrc
-rw-r--r--    1 root    operator    605 Sep 14  2014 .profile
drwx------    2 root    operator    384 Mar 16 10:15 .ssh
drwxr-xr-x    4 root    operator    640 Mar 18 18:06 OS2021_Project1.Shell
-rwx------    1 root    operator      0 Mar 19 09:22 result.txt
```

(4) `vi result.txt`

```
total 48
drwxr-xr-x    4 root    operator    704 Mar 19 09:22 .
drwxr-xr-x   17 root    operator   1408 Mar 16 10:24 ..
-rw-r--r--    1 root    operator     44 Sep 14  2014 .exrc
-rw-r--r--    1 root    operator    605 Sep 14  2014 .profile
drwx------    2 root    operator    384 Mar 16 10:15 .ssh
drwxr-xr-x    4 root    operator    640 Mar 18 18:06 OS2021_Project1.Shell
-rwx------    1 root    operator      0 Mar 19 09:22 result.txt
~
~
~
~
~
~
~
~
~
~
~
~
~
~
result.txt: unmodified: line 1
```

(5) `grep a < result.txt`

```
[root@yeeshell /root]# grep a < result.txt
total 48
drwxr-xr-x    4 root    operator    704 Mar 19 09:22 .
drwxr-xr-x   17 root    operator   1408 Mar 16 10:24 ..
-rw-r--r--    1 root    operator     44 Sep 14  2014 .exrc
-rw-r--r--    1 root    operator    605 Sep 14  2014 .profile
drwx------    2 root    operator    384 Mar 16 10:15 .ssh
drwxr-xr-x    4 root    operator    640 Mar 18 18:06 OS2021_Project1.Shell
-rwx------    1 root    operator      0 Mar 19 09:22 result.txt
```

(6) `ls -a -l | grep a`

```
[root@yeeshell /root]# ls -a -l | grep a
total 56
drwxr-xr-x    4 root    operator    704 Mar 19 09:22 .
drwxr-xr-x   17 root    operator   1408 Mar 16 10:24 ..
-rw-r--r--    1 root    operator     44 Sep 14  2014 .exrc
-rw-r--r--    1 root    operator    605 Sep 14  2014 .profile
drwx------    2 root    operator    384 Mar 16 10:15 .ssh
drwxr-xr-x    4 root    operator    640 Mar 18 18:06 OS2021_Project1.Shell
-rwx------    1 root    operator    410 Mar 19 09:28 result.txt
```

(7) `vi result.txt`

This command can not be executed in the **MINIX3** environment. It prints the following error information.

```
# vi result.txt &
# ex/vi: Vi's standard input and output must be a terminal
```

(8) `mytop`

```
[root@yeeshell /root]# mytop
memory(KBytes): 1046972 total    998812 free     995644 cached
CPU states:    0.09% user,    0.61% system   0.70% in total
```

(9) `history n`

```
[root@yeeshell /root]# history 4
ID       Commandline
1        cd /root

2        mytop

3        history 5

4        ls -al
```

(10) `exit`

```
[root@yeeshell /root]# exit
#
```