

[CSCD340HW8 - .mssh TEST RUNS]

1) NO STARTUP FILE

```
bluehat@ubuntu:~/Documents/GitHub/cscd340labs-J4Ever66/Lab8$ ./mssh
command?: exit
```

2) STARTUP FILE

```
bluehat@ubuntu:~/Documents/GitHub/cscd340labs-J4Ever66/Lab8$ ./mssh
command?: exit
```

3) NO HISTORY FILE

```
bluehat@ubuntu:~/Documents/GitHub/cscd340labs-J4Ever66/Lab8$ ./mssh
command?: ls -l
total 168
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 14:54 alias
-rw-rw-r-- 1 bluehat bluehat 5090 Jan 26 14:57 cscd340hw8.c
-rw-rw-r-- 1 bluehat bluehat 5117 Jan 26 14:57 cscd340hw8.c~
-rw-rw-r-- 1 bluehat bluehat 1205 Jan 21 15:51 cscd340Lab8.c~
-rw-rw-r-- 1 bluehat bluehat 68115 Jan 20 15:03 cscd340_w16_lab7.pdf
drwxrwxr-x 2 bluehat bluehat 4096 Jan 25 19:59 history
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 linkedlist
-rw-rw-r-- 1 bluehat bluehat 1630 Jan 25 17:44 Makefile
-rw-rw-r-- 1 bluehat bluehat 1630 Jan 25 17:44 Makefile~
-rwxrwxr-x 1 bluehat bluehat 36416 Jan 26 15:16 mssh
drwxrwxr-x 2 bluehat bluehat 4096 Jan 25 20:00 mycd
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 paths
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 pipes
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 process
drwxrwxr-x 2 bluehat bluehat 4096 Jan 24 09:52 tokenize
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 utils
command?: exit
```

4) HISTORY FILE

```
bluehat@ubuntu:~/Documents/GitHub/cscd340labs-J4Ever66/Lab8$ ./mssh
command?: history
1 ls
2 history
command?: exit
```

5) BASIC COMMANDS

bluehat@ubuntu:~/Documents/GitHub/cscd340labs-J4Ever66/Lab8\$./mssh

command?: ls -l

total 168

drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 14:54 alias

-rw-rw-r-- 1 bluehat bluehat 5090 Jan 26 14:57 cscd340hw8.c

-rw-rw-r-- 1 bluehat bluehat 5117 Jan 26 14:57 cscd340hw8.c~

-rw-rw-r-- 1 bluehat bluehat 1205 Jan 21 15:51 cscd340Lab8.c~

-rw-rw-r-- 1 bluehat bluehat 68115 Jan 20 15:03 cscd340_w16_lab7.pdf

drwxrwxr-x 2 bluehat bluehat 4096 Jan 25 19:59 history

drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 linkedlist

-rw-rw-r-- 1 bluehat bluehat 1630 Jan 25 17:44 Makefile

-rw-rw-r-- 1 bluehat bluehat 1630 Jan 25 17:44 Makefile~

-rwxrwxr-x 1 bluehat bluehat 36416 Jan 26 15:16 mssh

drwxrwxr-x 2 bluehat bluehat 4096 Jan 25 20:00 mycd

drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 paths

drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 pipes

drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 process

drwxrwxr-x 2 bluehat bluehat 4096 Jan 24 09:52 tokenize

drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 utils

command?: pwd

/home/bluehat/Documents/GitHub/cscd340labs-J4Ever66/Lab8

command?: ls -al

total 188

drwxrwxr-x 11 bluehat bluehat 4096 Jan 26 15:20 .

drwxrwxr-x 12 bluehat bluehat 4096 Jan 24 15:19 ..

drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 14:54 alias

-rw-rw-r-- 1 bluehat bluehat 5090 Jan 26 14:57 cscd340hw8.c

-rw-rw-r-- 1 bluehat bluehat 5117 Jan 26 14:57 cscd340hw8.c~

-rw-rw-r-- 1 bluehat bluehat 1205 Jan 21 15:51 cscd340Lab8.c~

-rw-rw-r-- 1 bluehat bluehat 68115 Jan 20 15:03 cscd340_w16_lab7.pdf

drwxrwxr-x 2 bluehat bluehat 4096 Jan 25 19:59 history

drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 linkedlist

-rw-rw-r-- 1 bluehat bluehat 1630 Jan 25 17:44 Makefile

-rw-rw-r-- 1 bluehat bluehat 1630 Jan 25 17:44 Makefile~

-rwxrwxr-x 1 bluehat bluehat 36416 Jan 26 15:16 mssh

-rw-rw-r-- 1 bluehat bluehat 165 Jan 25 21:11 .msshrc

-rw-rw-r-- 1 bluehat bluehat 65 Jan 25 15:24 .msshrc~

-rw-rw-r-- 1 bluehat bluehat 15 Jan 26 15:22 .msshrc_history

drwxrwxr-x 2 bluehat bluehat 4096 Jan 25 20:00 mycd

```

drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 paths
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 pipes
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 process
drwxrwxr-x 2 bluehat bluehat 4096 Jan 24 09:52 tokenize
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 utils
command?: ls -a
.      cscd340Lab8.c~      Makefile~      mycd      utils
..     cscd340_w16_lab7.pdf mssh      paths
alias      history      .msshrc      pipes
cscd340hw8.c linkedlist .msshrc~      process
cscd340hw8.c~ Makefile      .msshrc_history tokenize
command?: exit

```

6) PIPED COMMANDS

```
bluehat@ubuntu:~/Documents/GitHub/cscd340labs-J4Ever66/Lab8$ ./mssh
```

```
command?: ls -l | wc -w
```

```
146
```

```
command?: pwd | wc -w
```

```
1
```

```
command?: exit
```

7) ALIASES -- [LA]&[AL] FROM FILE

```
bluehat@ubuntu:~/Documents/GitHub/cscd340labs-J4Ever66/Lab8$ ./mssh
```

```
command?: AL
```

```
total 188
```

```
drwxrwxr-x 11 bluehat bluehat 4096 Jan 26 15:26 .
```

```
drwxrwxr-x 12 bluehat bluehat 4096 Jan 24 15:19 ..
```

```
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 14:54 alias
```

```
-rw-rw-r-- 1 bluehat bluehat 5090 Jan 26 14:57 cscd340hw8.c
```

```
-rw-rw-r-- 1 bluehat bluehat 5117 Jan 26 14:57 cscd340hw8.c~
```

```
-rw-rw-r-- 1 bluehat bluehat 1205 Jan 21 15:51 cscd340Lab8.c~
```

```
-rw-rw-r-- 1 bluehat bluehat 68115 Jan 20 15:03 cscd340_w16_lab7.pdf
```

```
drwxrwxr-x 2 bluehat bluehat 4096 Jan 25 19:59 history
```

```

drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 linkedlist
-rw-rw-r-- 1 bluehat bluehat 1630 Jan 25 17:44 Makefile
-rw-rw-r-- 1 bluehat bluehat 1630 Jan 25 17:44 Makefile~
-rwxrwxr-x 1 bluehat bluehat 36416 Jan 26 15:26 mssh
-rw-rw-r-- 1 bluehat bluehat 165 Jan 25 21:11 .mssshrc
-rw-rw-r-- 1 bluehat bluehat 65 Jan 25 15:24 .mssshrc~
-rw-rw-r-- 1 bluehat bluehat 69 Jan 26 15:28 .mssshrc_history
drwxrwxr-x 2 bluehat bluehat 4096 Jan 25 20:00 mycd
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 paths
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:26 pipes
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 process
drwxrwxr-x 2 bluehat bluehat 4096 Jan 24 09:52 tokenize
drwxrwxr-x 2 bluehat bluehat 4096 Jan 26 15:16 utils
command?: LA
.          cscd340Lab8.c~      Makefile~      mycd          utils
..         cscd340_w16_lab7.pdf mssh          paths
alias      history            .mssshrc     pipes
cscd340hw8.c linkedlist        .mssshrc~    process
cscd340hw8.c~ Makefile          .mssshrc_history tokenize
command?: alias PW="pwd"
command?: PW
/home/bluehat/Documents/GitHub/cscd340labs-J4Ever66/Lab8
command?: unalias PW
command?: PW
Command could not be found.
command?: exit

```

8) HISTORY

```
bluehat@ubuntu:~/Documents/GitHub/cscd340labs-J4Ever66/Lab8$ ./mssh
```

command?: history

16 alias

17 PW

18 unalias

19 PW

20 history

command?: history

16 alias

17 PW

18 unalias

19 PW

20 history

command?: pwd

/home/bluehat/Documents/GitHub/cscd340labs-J4Ever66/Lab8

command?: history

18 unalias

19 PW

20 history

21 pwd

22 history

command?: pwd

/home/bluehat/Documents/GitHub/cscd340labs-J4Ever66/Lab8

command?: pwd

/home/bluehat/Documents/GitHub/cscd340labs-J4Ever66/Lab8

command?: history

20 history

21 pwd

22 history

23 pwd

24 history

command?: exit

9) CD – (Works with [..])

bluehat@ubuntu:~/Documents/GitHub/cscd340labs-J4Ever66/Lab8\$./mssh

command?: pwd

/home/bluehat/Documents/GitHub/cscd340labs-J4Ever66/Lab8

command?: cd ..

command?: pwd

/home/bluehat/Documents/GitHub/cscd340labs-J4Ever66

command?: cd ../../../../

command?: pwd

/home

command?: cd ./bluehat/Documents/GitHub/

command?: pwd

/home/bluehat/Documents/GitHub

command?: cd ../../../../

command?: pwd

/home

command?: cd ./bluehat/Documents/GitHub

command?: pwd

/home/bluehat/Documents/GitHub

command?: exit

10) MULTIPLE COMMAND VAL RUN

command?: pwd

--3557-- REDIR: 0x4ec1c70 (libc.so.6:strcmp) redirected to 0x4a26730 (_vgnU_ifunc_wrapper)

--3557-- REDIR: 0x4ed7ca0 (libc.so.6:__strcmp_sse2_unaligned) redirected to 0x4c2ffd0 (strcmp)

--3557-- REDIR: 0x4ec1820 (libc.so.6:strcat) redirected to 0x4a26730 (_vgnU_ifunc_wrapper)

--3557-- REDIR: 0x4edf930 (libc.so.6:__strcat_sse2_unaligned) redirected to 0x4c2ec40 (strcat)

--3558-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3558-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

--3559-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3559-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

/home/bluehat/Documents/GitHub/cscd340labs-J4Ever66/Lab8

--3557-- REDIR: 0x4ec7360 (libc.so.6: __GI_memcpy) redirected to 0x4c33060 (__GI_memcpy)

command?: cd ..

--3557-- REDIR: 0x4ec7190 (libc.so.6: memset) redirected to 0x4a26730 (_vgnU_ifunc_wrapper)

--3557-- REDIR: 0x4ec7200 (libc.so.6: __GI_memset) redirected to 0x4c32520 (memset)

command?: pwd

--3560-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3560-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

--3561-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3561-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

/home/bluehat/Documents/GitHub/cscd340labs-J4Ever66

command?: cd ../../../../

command?: pwd

--3562-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3562-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

--3563-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3563-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

/home

command?: cd ./bluehat/Documents

command?: pwd

--3564-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3564-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

--3565-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3565-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

/home/bluehat/Documents

command?: LA

--3566-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3566-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

. .. back1 GitHub OperatingSystems

command?: AL

--3567-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3567-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

total 20

drwxr-xr-x 5 bluehat bluehat 4096 Jan 17 16:05 .

drwxr-xr-x 18 bluehat bluehat 4096 Jan 26 13:07 ..

drwxrwxr-x 8 bluehat bluehat 4096 Jan 17 16:05 back1

drwxrwxr-x 3 bluehat bluehat 4096 Jan 25 18:45 GitHub

drwxrwxr-x 3 bluehat bluehat 4096 Jan 12 11:00 OperatingSystems

command?: history

22 cd ./bluehat/Documents

23 pwd

24 LA

25 AL

26 history

command?: history

22 cd ./bluehat/Documents

23 pwd

24 LA

25 AL

26 history

command?: ls -l | wc -w

--3569-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3569-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

--3568-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3568-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

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command?: ls -l

--3570-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3570-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

--3571-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3571-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

total 12

drwxrwxr-x 8 bluehat bluehat 4096 Jan 17 16:05 back1

drwxrwxr-x 3 bluehat bluehat 4096 Jan 25 18:45 GitHub

drwxrwxr-x 3 bluehat bluehat 4096 Jan 12 11:00 OperatingSystems

command?: alias PW="pwd"

command?: PW

--3572-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3572-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

/home/bluehat/Documents

command?: unalias PW

command?: PW

--3573-- REDIR: 0x4ec1a50 (libc.so.6: __GI_strchr) redirected to 0x4c2ea40 (__GI_strchr)

--3573-- REDIR: 0x4ec3b40 (libc.so.6: __GI_strncmp) redirected to 0x4c2f750 (__GI_strncmp)

Command could not be found.

command?: exit

==3557==

==3557== HEAP SUMMARY:

==3557== in use at exit: 0 bytes in 0 blocks

==3557== total heap usage: 454 allocs, 454 frees, 7,202 bytes allocated

==3557==

==3557== All heap blocks were freed -- no leaks are possible

==3557==

==3557== ERROR SUMMARY: 0 errors from 0 contexts (suppressed: 0 from 0)