

```

21:37:13 eflubacher@Flashpoint:ulab4 $ mv ~/Downmv ~/Downloads/UNIX\ Lab\ #4.pdf .
21:37:19 eflubacher@Flashpoint:ulab4 $ touch ice_cream.txt
21:38:04 eflubacher@Flashpoint:ulab4 $ vim ice_cream.txt
21:39:01 eflubacher@Flashpoint:ulab4 $ wc ice_cream.txt
      6      15     105 ice_cream.txt
21:39:04 eflubacher@Flashpoint:ulab4 $ sort !$
sort ice_cream.txt
Alumni Swirl
Bittersweet Mint
Black Raspberry
Butter Pecan
Chocolate Chip Cookie Doug
Death by Chocolate
21:39:27 eflubacher@Flashpoint:ulab4 $ █
[78] 0:bash*

21:42:17 eflubacher@Flashpoint:bin $ cp grep ~/Desktop/
21:42:25 eflubacher@Flashpoint:bin $ cp grep ~/cmpsc1122/unix labs/ulab4/
21:42:57 eflubacher@Flashpoint:bin $ rm g
    gcc      gccw      gccat      getopts      git-shell      gnumake      grodvi      grolbp      groups      gzip
    gatherheaderdoc  gdiffmk      genstrings  git      git-upload-archive  gperf      groff      grolj4      gunzip
    gcc      gem      getconf      git-cvsserver  git-upload-pack  grep      grofs      gropts      gzcat
    gcgore      gen_bridge_metadata  getopt      git-receive-pack  gm4      grn      grog      grotty      gzexe
21:42:57 eflubacher@Flashpoint:bin $ rm ~/grep
rm: /Users/eflubacher/grep: No such file or directory
21:43:14 eflubacher@Flashpoint:bin $ rm ~/Desktop/grep
21:43:22 eflubacher@Flashpoint:bin $ j ula_4
/Users/eflubacher/Documents/GitHub/BankSimulation122
21:43:30 eflubacher@Flashpoint:BankSimulation122 $ j ulab
/Users/eflubacher/cmpsc1122/unix labs/ulab3
21:43:35 eflubacher@Flashpoint:ulab3 $ cd ../ulab4
21:43:39 eflubacher@Flashpoint:ulab4 $ PATH=./grep
21:44:01 eflubacher@Flashpoint:ulab4 $ grep Chocolate ice_cream.txt
-bash: grep: command not found
21:44:08 eflubacher@Flashpoint:ulab4 $ PATH=.
21:44:12 eflubacher@Flashpoint:ulab4 $ grep Chocolate ice_cream.txt
Chocolate Chip Cookie Doug
Death by Chocolate
21:44:27 eflubacher@Flashpoint:ulab4 $ ls
-bash: ls: command not found
21:44:39 eflubacher@Flashpoint:ulab4 $
[78] 0:bash*

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This third screen shot has output for the third and fourth screen shots in the lab

```
eflubacher 86134 0.0 0.0 4298304 308 s050 Ss+ Wed004PM 0:00.02 -bash
eflubacher 85274 0.0 0.0 4314688 308 s057 Ss Wed02PM 0:00.02 -bash
eflubacher 85147 0.0 0.0 4296256 308 s056 Ss+ Wed02PM 0:00.03 -bash
eflubacher 84238 0.0 0.0 4333120 924 s039 Ss+ Wed01PM 0:00.40 -bash
eflubacher 84215 0.0 0.0 4315712 308 s000 S Wed01PM 0:00.02 -bash
eflubacher 59559 0.0 0.0 4333120 308 s051 Ss+ Mon01PM 0:00.08 -bash
eflubacher 59465 0.0 0.0 4297280 308 s002 Ss+ Mon01PM 0:00.04 -bash
eflubacher 55179 0.0 0.0 4298304 308 s053 Ss+ Mon01PM 0:00.02 -bash
eflubacher 53723 0.0 0.0 4308544 308 s052 Ss+ Mon01PM 0:00.05 -bash
eflubacher 53475 0.0 0.0 4308544 308 s048 Ss+ Mon12PM 0:00.02 -bash
eflubacher 52815 0.0 0.0 4306496 308 s047 Ss+ Mon12PM 0:00.02 -bash
eflubacher 52590 0.0 0.0 4308544 308 s046 Ss+ Mon12PM 0:00.02 -bash
eflubacher 45734 0.0 0.0 4291136 308 s045 Ss+ 2Mar18 0:00.02 -bash
eflubacher 42285 0.0 0.0 4298304 308 s043 Ss+ 1Mar18 0:00.02 -bash
eflubacher 42079 0.0 0.0 4307520 308 s042 Ss+ 1Mar18 0:00.06 -bash
eflubacher 41948 0.0 0.0 4298304 308 s023 Ss+ 28Feb18 0:00.01 -bash
eflubacher 40808 0.0 0.0 4305472 308 s044 Ss+ 28Feb18 0:00.02 -bash
eflubacher 40293 0.0 0.0 4307520 308 s041 Ss+ 28Feb18 0:00.01 -bash
eflubacher 38888 0.0 0.0 4316736 308 s040 Ss+ 28Feb18 0:00.01 -bash
eflubacher 38780 0.0 0.0 4333120 308 s038 Ss 28Feb18 0:00.11 -bash
eflubacher 37062 0.0 0.0 4333120 308 s021 Ss+ 28Feb18 0:00.46 -bash
eflubacher 36177 0.0 0.0 4307520 8 s037 Ss+ 27Feb18 0:00.02 -bash
eflubacher 36103 0.0 0.0 4308544 8 s036 Ss+ 27Feb18 0:00.03 -bash
eflubacher 34902 0.0 0.0 4305472 8 s035 Ss+ 27Feb18 0:00.02 -bash
eflubacher 34329 0.0 0.0 4298304 8 s034 Ss+ 27Feb18 0:00.02 -bash
eflubacher 31065 0.0 0.0 4315712 8 s033 Ss+ 26Feb18 0:00.02 -bash
eflubacher 25670 0.0 0.0 4333120 8 s032 Ss+ 25Feb18 0:00.06 -bash
eflubacher 23119 0.0 0.0 4308544 8 s031 Ss+ 23Feb18 0:00.02 -bash
eflubacher 22573 0.0 0.0 4297280 8 s030 Ss+ 23Feb18 0:00.02 -bash
eflubacher 17534 0.0 0.0 4300352 8 s027 Ss+ 21Feb18 0:00.02 -bash
eflubacher 17492 0.0 0.0 4291136 8 s029 Ss+ 21Feb18 0:00.01 -bash
eflubacher 17451 0.0 0.0 4300352 8 s026 Ss+ 21Feb18 0:00.02 -bash
eflubacher 17403 0.0 0.0 4299328 8 s028 Ss+ 21Feb18 0:00.01 -bash
eflubacher 12676 0.0 0.0 4300352 8 s011 Ss 19Feb18 0:00.02 -bash
eflubacher 9816 0.0 0.0 4315712 8 s019 Ss+ 18Feb18 0:00.17 -bash
eflubacher 6796 0.0 0.0 4316736 8 s025 Ss+ 16Feb18 0:00.02 -bash
eflubacher 6533 0.0 0.0 4307520 8 s024 Ss+ 16Feb18 0:00.03 -bash
eflubacher 6457 0.0 0.0 4316736 8 s022 Ss+ 16Feb18 0:00.03 -bash
eflubacher 4043 0.0 0.0 4292160 8 s020 Ss+ 14Feb18 0:00.02 -bash
eflubacher 3903 0.0 0.0 4298304 8 s010 Ss+ 14Feb18 0:00.01 -bash
eflubacher 99593 0.0 0.0 4288064 8 s017 Ss+ 12Feb18 0:00.01 -bash
eflubacher 99557 0.0 0.0 4297280 8 s018 Ss+ 12Feb18 0:00.02 -bash
eflubacher 99334 0.0 0.0 4298304 8 s016 Ss 12Feb18 0:00.02 -bash
eflubacher 99270 0.0 0.0 4299328 8 s014 Ss 12Feb18 0:00.02 -bash
eflubacher 98603 0.0 0.0 4298304 8 s015 Ss+ 12Feb18 0:00.02 -bash
eflubacher 87714 0.0 0.0 4306496 8 s013 Ss+ 9Feb18 0:00.03 -bash
eflubacher 87651 0.0 0.0 4308544 8 s012 Ss+ 9Feb18 0:00.02 -bash
eflubacher 7588 0.0 0.0 4298304 8 s009 Ss+ 3Feb18 0:00.01 -bash
eflubacher 7566 0.0 0.0 4288064 8 s008 Ss+ 3Feb18 0:00.01 -bash
eflubacher 7541 0.0 0.0 4297280 8 s006 Ss+ 3Feb18 0:00.02 -bash
eflubacher 6056 0.0 0.0 4315712 8 s007 Ss+ 2Feb18 0:00.07 -bash
eflubacher 3636 0.0 0.0 4291136 8 s003 Ss+ 2Feb18 0:00.02 -bash
eflubacher 3383 0.0 0.0 4306496 8 s005 Ss+ 2Feb18 0:00.02 -bash
eflubacher 97688 0.0 0.0 4300352 260 s004 Ss+ 29Jan18 0:00.06 -bash
eflubacher 89735 0.0 0.0 4324928 8 s001 Ss+ 26Jan18 0:00.25 -bash
eflubacher 98112 0.0 0.0 4267768 888 s068 S+ 9:46PM 0:00.00 grep bash
eflubacher 98104 0.0 0.0 4290112 1600 s068 S 9:45PM 0:00.03 bash
21:46:53 eflubacher@Flashpoint:ulab4 $ kill -9 98104
Killed: 9
21:47:13 eflubacher@Flashpoint:ulab4 $ df -h
Filesystem      Size  Used Avail Capacity iused      ifree %iused  Mounted on
/dev/disk1s1    466Gi  290Gi  170Gi    64% 1483164 9223372036853292643    0%  /
devfs           410Ki  410Ki   0Bi   100%   1418      0 100%  /dev
/dev/disk1s4    466Gi   5.0Gi  170Gi     3%      5 9223372036854775802    0%  /private/var/vm
map -hosts      0Bi    0Bi   0Bi   100%      0      0 100%  /net
map auto_home   0Bi    0Bi   0Bi   100%      0      0 100%  /home
21:47:27 eflubacher@Flashpoint:ulab4 $ du -h
644K .
21:47:29 eflubacher@Flashpoint:ulab4 $ du -h /bin
2.6M /bin
21:47:51 eflubacher@Flashpoint:ulab4 $
[78] 0: bash*
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