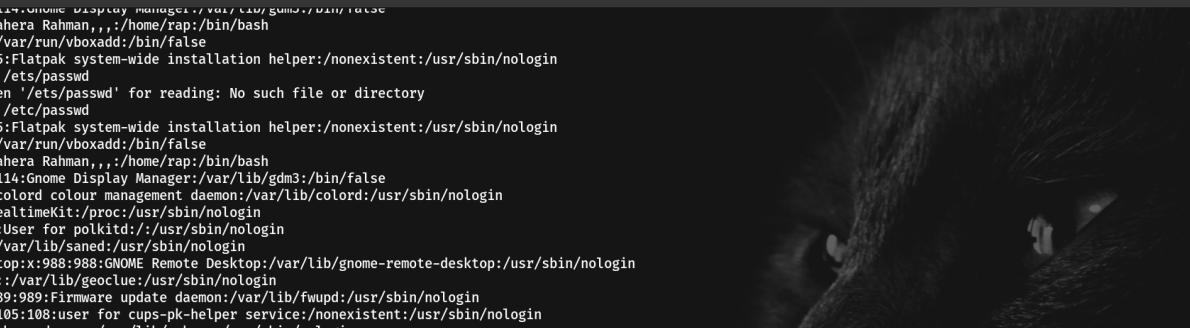


# Lab 8

# Question 1

## Practice 1

```
1:rapt@cis106:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin/nologin
bin:x:2:2:bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
_apt:x:42:65534::/nonexistent:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-networkd:x:998:998:systemd Network Management:/usr/sbin/nologin
dhcpcd:x:100:65534:DHCP Client Daemon:/usr/lib/dhcpcd:/bin/false
tss:x:101:103:TPM software stack:/var/lib/tpm:/bin/false
systemd-timesync:x:991:991:systemd Time Synchronization:/usr/sbin/nologin
messagebus:x:990:990:System Message Bus:/nonexistent:/usr/sbin/nologin
dnsmasq:x:999:65534:dnsmasq:/var/lib/misc:/usr/sbin/nologin
avahi:x:102:107:Avahi mDNS daemon:/run/avahi-daemon:/usr/sbin/nologin
speech-dispatcher:x:103:29:Speech Dispatcher:/run/speech-dispatcher:/bin/false
usbmux:x:104:46:usbmux daemon:/var/lib/usbmux:/usr/sbin/nologin
cups-pk-helper:x:105:108:user for cups-pk-helper service:/nonexistent:/usr/sbin/nologin
fwupd-refresh:x:989:989:Firmware update daemon:/var/lib/fwupd:/usr/sbin/nologin
geoclue:x:106:100:/var/lib/geoclue:/usr/sbin/nologin
gnome-remote-desktop:x:988:988:GNOME Remote Desktop:/var/lib/gnome-remote-desktop:/usr/sbin/nologin
saned:x:107:111:/var/lib/saned:/usr/sbin/nologin
polkitd:x:987:987:User for polkitd:/usr/sbin/nologin
rtkit:x:108:112:RealtimeKit:/proc:/usr/sbin/nologin
```



```
1:rap@cis106: ~${student}: rap@cis106: ~rap@cis106: ~

Debian-GDM:~:100:114:GNOME Display Manager:/var/lib/gdm:/bin/false
rap:x:1000:1000:Tahera Rahman,,,:/home/rap:/bin/bash
vboxaddd:x:997:1::/var/run/vboxaddd:/bin/false
_flatpak:x:111:115:Flatpak system-wide installation helper:/nonexistent:/usr/sbin/nologin
rap@cis106: ~$ tac /etc/passwd
tac: failed to open '/etc/passwd' for reading: No such file or directory
rap@cis106: ~$ tac /etc/passwd
_flatpak:x:111:115:Flatpak system-wide installation helper:/nonexistent:/usr/sbin/nologin
vboxaddd:x:997:1::/var/run/vboxaddd:/bin/false
rap:x:1000:1000:Tahera Rahman,,,:/home/rap:/bin/bash
Debian-gdm:x:110:114:GNOME Display Manager:/var/lib/gdm3:/bin/false
colord:x:109:113:colord colour management daemon:/var/lib/colord:/usr/sbin/nologin
rtkit:x:108:112:RealtimeKit:/proc:/usr/sbin/nologin
polkitd:x:987:987:User for polkitd:/usr/sbin/nologin
saned:x:107:111:~/var/lib/saned:/usr/sbin/nologin
gnome-remote-desktop:x:988:988:GNOME Remote Desktop:/var/lib/gnome-remote-desktop:/usr/sbin/nologin
geoclue:x:106:10://var/lib/geoclue:/usr/sbin/nologin
fwupd-refresh:x:989:989:Firmware update daemon:/var/lib/fwupd:/usr/sbin/nologin
cups-pk-helper:x:105:108:user for cups-pk-helper service:/nonexistent:/usr/sbin/nologin
usbmux:x:104:46:usbmux daemon:/var/lib/usbmux:/usr/sbin/nologin
speech-dispatcher:x:103:29:Speech Dispatcher:/run/speech-dispatcher:/bin/false
avahi:x:102:107:Avahi mDNS daemon:/run/avahi-daemon:/usr/sbin/nologin
dnsmasq:x:999:65534:dnsmasq:/var/lib/misc:/usr/sbin/nologin
messagebus:x:990:990:System Message Bus:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:991:991:systemd Time Synchronization:/:/usr/sbin/nologin
tss:x:101:103:TPM software stack:/var/lib/tpm:/bin/false
dhcpcd:x:100:65534:DHCP Client Daemon:/usr/lib/dhcpcd:/bin/false
systemd-network:x:998:998:systemd Network Management:/:/usr/sbin/nologin
nobody:x:6534:65534:nobody:/nonexistent:/usr/sbin/nologin
_apt:x:42:65534::/nonexistent:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
```

```

Applications Dec 2 7:57 PM $[student]: rap@cis106: ~rap@cis106: ~
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
root:x:0:0:root:/root:/bin/bash
rap@cis106:~$ cat -nE /etc/passwd
 1 root:x:0:0:root:/root:/bin/bash$
 2 daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin$
 3 bin:x:2:2:bin:/bin:/usr/sbin/nologin$
 4 sys:x:3:3:sys:/dev:/usr/sbin/nologin$
 5 sync:x:4:65534:sync:/bin:/bin/sync$
 6 games:x:5:60:games:/usr/games:/usr/sbin/nologin$
 7 man:x:6:12:man:/var/cache/man:/usr/sbin/nologin$
 8 lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin$
 9 mail:x:8:8:mail:/var/mail:/usr/sbin/nologin$
10 news:x:9:9:news:/var/spool/news:/usr/sbin/nologin$
11 uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin$
12 proxy:x:13:13:proxy:/bin:/usr/sbin/nologin$
13 www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin$
14 backup:x:34:34:backup:/var/backups:/usr/sbin/nologin$
15 list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin$
16 irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin$
17 _apt:x:42:65534::/nonexistent:/usr/sbin/nologin$
18 nobody:x:65534:65534::nobody:/nonexistent:/usr/sbin/nologin$
19 systemd-network:x:998:998:systemd Network Management:/:/usr/sbin/nologin$
20 dhcpcd:x:100:65534:DHCP Client Daemon:/usr/lib/dhcpcd:/bin/false$
21 tss:x:101:103:TPM software stack:/var/lib/tpm:/bin/false$
22 systemd-timesync:x:991:991:systemd Time Synchronization:/:/usr/sbin/nologin$
23 messagebus:x:990:990:System Message Bus:/nonexistent:/usr/sbin/nologin$
24 dnsmasq:x:999:65534:dnsmasq:/var/lib/misc:/usr/sbin/nologin$
25 avahi:x:102:107:Avahi mDNS daemon:/run/avahi-daemon:/usr/sbin/nologin$
26 speech-dispatcher:x:103:29:Speech Dispatcher:/run/speech-dispatcher:/bin/false$
27 usbmux:x:104:46:usbmux daemon:/var/lib/usbmux:/usr/sbin/nologin$
28 cups-pk-helper:x:105:108:user for cups-pk-helper service:/nonexistent:/usr/sbin/nologin$
29 fwupd-refresh:x:989:989:Firmware update daemon:/var/lib/fwupd:/usr/sbin/nologin$
30 geoclue:x:106:110:/:/var/lib/geoclue:/usr/sbin/nologin$
31 gnome-remote-desktop:x:988:988:GNOME Remote Desktop:/var/lib/gnome-remote-desktop:/usr/sbin/nologin$
32 saned:x:107:111:/:/var/lib/saned:/usr/sbin/nologin$
33 polkitd:x:987:987:User for polkitd:/:/usr/sbin/nologin$
34 rtkit:x:108:112:RealtimeKit:/proc:/usr/sbin/nologin$
35 colord:x:109:113:colord colour management daemon:/var/lib/colord:/usr/sbin/nologin$
36 Debian-gdm:x:110:114:Gnome Display Manager:/var/lib/gdm3:/bin/false$
37 rap:x:1000:1000:Tahera Rahman,,,:/home/rap:/bin/bash$
38 vboxadd:x:997:1::/var/run/vboxadd:/bin/false$
39 _flatpak:x:111:115:Flatpak system-wide installation helper:/nonexistent:/usr/sbin/nologin$
rap@cis106:~$ head -n 5 /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
rap@cis106:~$ tail -1 /etc/passwd
_flatpak:x:111:115:Flatpak system-wide installation helper:/nonexistent:/usr/sbin/nologin
rap@cis106:~$ head -1 /etc/passwd
root:x:0:0:root:/root:/bin/bash
rap@cis106:~$ cat -n
 1

```

## Practice 2

```
Applications Dec 2 8:12 PM ${student}: rap@cis106:~$[TR] ~
rap@cis106:~$ cut -d":" -f1 /etc/passwd
root
daemon
bin
sys
sync
games
man
lp
mail
news
uucp
proxy
www-data
backup
list
irc
_apt
nobody
systemd-network
dhpcd
tss
systemd-timesync
messagebus
dnsmasq
avahi
speech-dispatcher
usbmux
cups-pk-helper
fwupd-refresh
geoclue
gnome-remote-desktop
saned
polkitd
rtkit
Applications Dec 2 8:12 PM ${student}: rap@cis106:~$[TR] ~
rap@cis106:~$ cut -d":" -f1,6 /etc/passwd
root:/root
daemon:/usr/sbin
bin:/bin
sys:/dev
sync:/bin
games:/usr/games
man:/var/cache/man
lp:/var/spool/lpd
mail:/var/mail
news:/var/spool/news
uucp:/var/spool/uucp
proxy:/bin
www-data:/var/www
backup:/var/backups
list:/var/list
irc:/run/ircd
_apt:/nonexistent
nobody:/nonexistent
systemd-network:/
dhpcd:/usr/lib/dhpcd
tss:/var/lib/tpm
systemd-timesync:/
messagebus:/nonexistent
dnsmasq:/var/lib/misc
avahi:/run/avahi-daemon
speech-dispatcher:/run/speech-dispatcher
usbmux:/var/lib/usbmux
cups-pk-helper:/nonexistent
fwupd-refresh:/var/lib/fwupd
geoclue:/var/lib/geoclue
gnome-remote-desktop:/var/lib/gnome-remote-desktop
saned:/var/lib/saned
polkitd:/
```

```
rap@cis106:~$[TR] ~
try cut --help for more information.
rap@cis106:~$ cut -d";" -f1,6,7 --output-delimiter=" > "/etc/passwd
root > /root > /bin/bash
daemon > /usr/sbin > /usr/sbin/nologin
bin > /bin > /usr/sbin/nologin
sys > /dev > /usr/sbin/nologin
sync > /bin > /bin/sync
games > /usr/games > /usr/sbin/nologin
man > /var/cache/man > /usr/sbin/nologin
lp > /var/spool/lpd > /usr/sbin/nologin
mail > /var/mail > /usr/sbin/nologin
news > /var/spool/news > /usr/sbin/nologin
uucp > /var/spool/uucp > /usr/sbin/nologin
proxy > /bin > /usr/sbin/nologin
www-data > /var/www > /usr/sbin/nologin
backup > /var/backups > /usr/sbin/nologin
list > /var/list > /usr/sbin/nologin
irc > /run/ircd > /usr/sbin/nologin
_apt > /nonexistent > /usr/sbin/nologin
nobody > /nonexistent > /usr/sbin/nologin
systemd-network > / > /usr/sbin/nologin
dhcpcd > /usr/lib/dhcpcd > /bin/false
tss > /var/lib/tpm > /bin/false
systemd-timesync > / > /usr/sbin/nologin
messagebus > /nonexistent > /usr/sbin/nologin
dnsmasq > /var/lib/misc > /usr/sbin/nologin
avahi > /run/avahi-daemon > /usr/sbin/nologin
speech-dispatcher > /run/speech-dispatcher > /bin/false
usbmux > /var/lib/usbmux > /usr/sbin/nologin
cups-pk-helper > /nonexistent > /usr/sbin/nologin
fwupd-refresh > /var/lib/fwupd > /usr/sbin/nologin
geoclue > /var/lib/geoclue > /usr/sbin/nologin
gnome-remote-desktop > /var/lib/gnome-remote-desktop > /usr/sbin/nologin
saned > /var/lib/saned > /usr/sbin/nologin
polkitd > / > /usr/sbin/nologin
rtkit > /proc > /usr/sbin/nologin
```

```
rap@cis106:~$[TR] ~
_flatpak > /nonexistent > /usr/sbin/nologin
rap@cis106:~$ cut -d";" -f1 ~/Documents/sample_files/Csv/cereal.csv
name
String
100% Bran
100% Natural Bran
All-Bran
All-Bran with Extra Fiber
Almond Delight
Apple Cinnamon Cheerios
Apple Jacks
Basic 4
Bran Chex
Bran Flakes
Cap'n Crunch
Cheerios
Cinnamon Toast Crunch
Clusters
Cocoa Puffs
Corn Chex
Corn Flakes
Corn Pops
Count Chocula
Cracklin' Oat Bran
Cream of Wheat (Quick)
Crispix
Crispy Wheat & Raisins
Double Chex
Froot Loops
Frosted Flakes
Frosted Mini-Wheats
Fruit & Fibre Dates, Walnuts, and Oats
Fruitful Bran
Fruity Pebbles
Golden Crisp
Golden Grahams
```



```
Applications Dec 2 8:14 PM
$ {student}: rap@cis106:~
```

```
rap@cis106:~$ cut -d"," -f1,4 --output-delimiter=" calories = ~/Documents/sample_files/Csv/cereal.csv
name calories = calories
String calories = Int
100% Bran calories = 70
100% Natural Bran calories = 120
All-Bran calories = 70
All-Bran with Extra Fiber calories = 50
Almond Delight calories = 110
Apple Cinnamon Cheerios calories = 110
Apple Jacks calories = 110
Basic 4 calories = 130
Bran Chex calories = 90
Bran Flakes calories = 90
Cap'n Crunch calories = 120
Cheerios calories = 110
Cinnamon Toast Crunch calories = 120
Clusters calories = 110
Cocoa Puffs calories = 110
Corn Chex calories = 110
Corn Flakes calories = 100
Corn Pops calories = 110
Count Chocula calories = 110
Cracklin' Oat Bran calories = 110
Cream of Wheat (Quick) calories = 100
Crispix calories = 110
Crispy Wheat & Raisins calories = 100
Double Chex calories = 100
Froot Loops calories = 110
Frosted Flakes calories = 110
Frosted Mini-Wheats calories = 100
Fruit & Fibre Dates, Walnuts, and Oats calories = 120
Fruitful Bran calories = 120
Fruity Pebbles calories = 110
Golden Crisp calories = 100
Golden Grahams calories = 110
```

## Practice 3

```
rap@cis106:~/Documents/sample_files/Csv$ sort cars.csv
AMC Ambassador Brougham;13.0;8;360.0;175.0;3821.;11.0;73;US
AMC Ambassador DPL;15.0;8;390.0;190.0;3850.;8.5;70;US
AMC Ambassador SST;17.0;8;304.0;150.0;3672.;11.5;72;US
AMC Concord;19.4;6;232.0;90.00;3210.;17.2;78;US
AMC Concord;24.3;4;151.0;90.00;3003.;20.1;80;US
AMC Concord d/l;18.1;6;258.0;120.0;3410.;15.1;78;US
AMC Concord DL;23.0;4;151.0;0;3035.;20.5;82;US
AMC Concord DL;6;20.2;6;232.0;90.00;3265.;18.2;79;US
AMC Gremlin;18.0;6;232.0;100.0;2789.;15.0;73;US
AMC Gremlin;19.0;6;232.0;100.0;2634.;13.0;71;US
AMC Gremlin;20.0;6;232.0;100.0;2914.;16.0;75;US
AMC Gremlin;21.0;6;199.0;90.00;2648.;15.0;70;US
AMC Hornet;18.0;6;199.0;97.00;2774.;15.5;70;US
AMC Hornet;18.0;6;232.0;100.0;2945.;16.0;73;US
AMC Hornet;19.0;6;232.0;100.0;2901.;16.0;74;US
AMC Hornet;22.5;6;232.0;90.00;3085.;17.6;76;US
AMC Hornet Sportabout (sw);18.0;6;258.0;110.0;2962.;13.5;71;US
AMC Matador;14.0;8;304.0;150.0;3672.;11.5;73;US
AMC Matador;15.0;6;258.0;110.0;3730.;19.0;75;US
AMC Matador;15.5;8;304.0;120.0;3962.;13.9;76;US
AMC Matador;16.0;6;258.0;110.0;3632.;18.0;74;US
AMC Matador;18.0;6;232.0;100.0;3288.;15.5;71;US
AMC Matador (sw);14.0;8;304.0;150.0;4257.;15.5;74;US
AMC Matador (sw);15.0;8;304.0;150.0;3892.;12.5;72;US
AMC Pacer;19.0;6;232.0;90.00;3211.;17.0;75;US
AMC Pacer d/l;17.5;6;258.0;95.00;3193.;17.8;76;US
AMC Rebel SST;16.0;8;304.0;150.0;3433.;12.0;70;US
AMC Rebel SST (sw);0;8;360.0;175.0;3850.;11.0;70;US
AMC Spirit DL;27.4;4;121.0;80.00;2670.;15.0;79;US
Audi 100LS;20.0;4;114.0;91.00;2582.;14.0;73;Europe
Audi 100LS;23.0;4;115.0;95.00;2694.;15.0;75;Europe
Audi 100 LS;24.0;4;107.0;90.00;2430.;14.5;70;Europe
Audi 4000;34.3;4;97.00;78.00;2188.;15.8;80;Europe
Audi 5000;20.3;5;131.0;103.0;2830.;15.9;78;Europe
```

```
rap@cis106:~/Documents/sample_files/Csv$ sort -o sorted_cars.csv cars.csv
cars.csv  contacts.csv  fake_users.csv  users_and_ips.csv
cereal.csv  country.csv  sorted_cars.csv
rap@cis106:~/Documents/sample_files/Csv$ wc -l sorted_cars.csv
408 sorted_cars.csv
rap@cis106:~/Documents/sample_files/Csv$ wc -m sorted_cars.csv
22663 sorted_cars.csv
rap@cis106:~/Documents/sample_files/Csv$
```

## Question 2

---

```
2: rap@cis106:~$ {TR} ~  
rap@cis106:~$ curl -s https://cis106.com/assets/scripts/chal8.sh | bash  
i [INFO] Generating 100 log entries in access.log...  
✓ [SUCCESS] Access.log created sucessfully. Location: /home/rap/access.log  
rap@cis106:~$ wc -l access.log  
100 access.log  
rap@cis106:~$ head -n 1 access.log  
2025-02-24 13:42:59 Faye /login FAIL  
rap@cis106:~$ tail -n 1 access.log  
2025-04-13 15:37:32 Asimov /admin SUCCESS  
rap@cis106:~$ head -n 15 access.log  
2025-02-24 13:42:59 Faye /login FAIL  
2025-07-23 10:32:17 Arisu /admin FAIL  
2025-06-25 18:29:23 Jet /dashboard DENIED  
2025-06-07 07:07:09 Walter /login SUCCESS  
2025-04-28 01:44:18 Asimov /download DENIED  
2025-01-08 15:30:34 Honami /dashboard DENIED  
2025-03-10 23:14:22 Faye /settings FAIL  
2025-08-22 01:08:55 Annie /admin SUCCESS  
2025-04-07 15:59:13 Faye /dashboard SUCCESS  
2025-01-08 00:36:44 Kei /admin DENIED  
2025-12-10 00:57:07 Spike /upload FAIL  
2025-04-19 12:56:57 Faye /login DENIED  
2025-01-10 06:59:03 Kei /logout DENIED  
2025-10-14 19:22:33 Ken /dashboard DENIED  
2025-04-21 12:27:38 Ein /dashboard DENIED  
rap@cis106:~$ █
```

```
2025-07-21 12:27:38 Ein /dashboard DENIED  
rap@cis106:~$ tail -n 15 access.log  
2025-11-07 04:50:24 Rei /reset SUCCESS  
2025-04-22 18:33:07 Faye /dashboard FAIL  
2025-05-01 11:26:02 Seras /dashboard FAIL  
2025-01-15 15:49:46 Rei /login DENIED  
2025-07-22 14:46:41 Walter /settings DENIED  
2025-04-02 04:29:59 Seras /upload FAIL  
2025-10-28 19:47:31 Kei /dashboard SUCCESS  
2025-07-18 05:33:18 Ken /upload FAIL  
2025-12-05 23:02:56 Ken /404 FAIL  
2025-02-02 21:34:52 Annie /404 DENIED  
2025-12-05 07:01:06 Seras /404 DENIED  
2025-02-17 17:59:57 Jet /admin SUCCESS  
2025-06-10 05:11:17 Spike /settings SUCCESS  
2025-01-11 09:22:27 Asimov /upload FAIL  
2025-04-13 15:37:32 Asimov /admin SUCCESS  
rap@cis106:~$ cut -d ' ' -f 3 access.log  
Faye  
Arisu  
Jet  
Walter  
Asimov  
Honami  
Faye  
Annie  
Faye
```

```
raye
Kei
Spike
Faye
Kei
Ken
Ein
Seras
```

```
Kei
```

```
Arisu
```

```
Kei
```

```
Julia
```

```
Spike
```

```
Faye
```

```
Arisu
```

```
Touka
```

```
Arisu
```

```
Honami
```

```
Haruka
```

```
Walter
```

```
Walter
```

```
Rei
```

```
Faye
```

```
Jet
```

```
Rei
```

```
Asimov
```

```
Faye
```

```
Rei
```

```
Faye
```

```
Seras
```

```
Rei
```

```
Walter
```

```
Seras
```

```
Kei
```

```
Ken
```

```
Ken
```

```
Annie
```

```
Seras
```

```
Jet
```

```
Spike
```

```
Asimov
```

```
Asimov
```

```
rap@cis106:~$ █
```

```
Asimov
rap@cis106:~$ sort -k 3,3 access.log -o sorted_access_log_by_uname.log
rap@cis106:~$ sort -k 4,4 access.log -o sorted_access_log_by_endpoint.log
rap@cis106:~$ cut -d ' ' -f 3,4 access.log
Faye /login
Arisu /admin
Jet /dashboard
Walter /login
Asimov /download
Honami /dashboard
Faye /settings
Annie /admin
Faye /dashboard
Kei /admin
Spike /upload
Faye /login
Kei /logout
Ken /dashboard
Ein /dashboard
Seras /admin
Kei /logout
Edward /login
Arisu /download
Spike /404
Faye /download
Kei /logout
Rei /reset
Asimov /reset
Walter /download
Jet /404
Kei /admin
Julia /dashboard
Touka /admin
Julia /settings
Rize /download
... . . .
```

```
Kei /upload
Arisu /logout
Kei /reset
Julia /download
Spike /reset
Faye /logout
Arisu /404
Touka /login
Arisu /404
Honami /upload
Haruka /404
Walter /logout
Walter /login
Rei /login
Faye /admin
Jet /upload
Rei /upload
Asimov /upload
Faye /reset
Rei /reset
Faye /dashboard
Seras /dashboard
Rei /login
Walter /settings
Seras /upload
Kei /dashboard
Ken /upload
Ken /404
Annie /404
Seras /404
Jet /admin
Spike /settings
Asimov /upload
Asimov /admin
rap@cis106:~$ █
```