

Lab 6 Submission

Question 1

```
/etc/passwd
desktop@desktop-VirtualBox:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin

desktop@desktop-VirtualBox:~$ cat -n -E /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$

desktop@desktop-VirtualBox:~$ tac /etc/passwd
_flatpak:x:129:140:Flatpak system-wide installation helper,,,:/nonexistent:/usr/
sbin/nologin
fwupd-refresh:x:128:136:fwupd-refresh user...:/run/systemd:/usr/sbin/nologin

desktop@desktop-VirtualBox:~$ head -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

desktop@desktop-VirtualBox:~$ tail -5 /etc/passwd
hplip:x:126:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:127:133:Gnome Display Manager:/var/lib/gdm3:/bin/false
desktop:x:1000:1000:desktop,,,:/home/desktop:/bin/bash
fwupd-refresh:x:128:136:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
_flatpak:x:129:140:Flatpak system-wide installation helper,,,:/nonexistent:/usr/
sbin/nologin
desktop@desktop-VirtualBox:~$
```

Question 2

```
desktop@desktop-VirtualBox: ~  
bin:x:2:2:bin:/bin:/usr/sbin/nologin  
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin  
root:x:0:0:root:/root:/bin/bash  
desktop@desktop-VirtualBox:~$ cut -d ':' -f1,7 /etc/passwd  
root:/bin/bash  
desktop@desktop-VirtualBox: ~  
desktop@desktop-VirtualBox:~$ cut -d ':' -f1,7 --output-delimiter='=' /etc/passwd  
root=/bin/bash  
daemon=/usr/sbin/nologin  
bin=/usr/sbin/nologin  
sys=/usr/sbin/nologin  
sync=/bin/sync  
games=/usr/sbin/nologin  
man=/usr/sbin/nologin  
desktop@desktop-VirtualBox: ~  
desktop@desktop-VirtualBox:~$ cut -d ':' --complement -s -f3 /etc/passwd  
root:x:0:root:/root:/bin/bash  
daemon:x:1:daemon:/usr/sbin:/usr/sbin/nologin  
bin:x:2:bin:/bin:/usr/sbin/nologin  
sys:x:3:sys:/dev:/usr/sbin/nologin  
sync:x:65534:sync:/bin:/bin/sync  
games:x:60:games:/usr/games:/usr/sbin/nologin  
man:x:12:man:/var/cache/man:/usr/sbin/nologin  
lp:x:7:lp:/var/spool/lpd:/usr/sbin/nologin  
mail:x:8:mail:/var/mail:/usr/sbin/nologin  
news:x:9:news:/var/spool/news:/usr/sbin/nologin  
uucp:x:10:uucp:/var/spool/uucp:/usr/sbin/nologin  
proxy:x:13:proxy:/bin:/usr/sbin/nologin  
www-data:x:33:www-data:/var/www:/usr/sbin/nologin  
backup:x:34:backup:/var/backups:/usr/sbin/nologin  
list:x:38:Mailing List Manager:/var/list:/usr/sbin/nologin  
irc:x:39:ircd:/usr/sbin/nologin
```

Question 3

```
desktop@desktop-VirtualBox:~$ cat /home/desktop/Documents/Books/pride-and-prejudice.txt
please you, that you shall stay with me until a month from now."
tell you these facts that you may know why I have such confidence in
that you think about it. Mina, I must stop. Good-night. Bless me in your
when you think it over: that all is not lost. This very creature that we
understand. You think then that those so small holes in the children's
what you think will happen."
expect you to believe. It is so hard to accept at once any abstract
want you to give me permission to read all Miss Lucy's papers and
bear you to the Borgo Pass to meet the diligence from Bukovina to
expect you to trust me so far."
yourself. You want a wife to nurse and look after you a bit; that you
"Then you want me not to let some previous conviction injure the
there. You were doubtless surprised at my letter?" This query was
"Perhaps you will come to town if I send to you, and take Madam Mina
evening. You will, I hope, find all things as you wish." At the door he
mystery. You will let me help, will you not? I know all up to a certain
If you will remain I shall in a few minutes join you."
which, you will remember, the patient twice ran away. The men stopped at
back, you will see how it was necessary. You are now in the bitter
that you will support the Project Gutenberg-tm mission of promoting
sure you will understand!" He had evidently self-control; so when the
"If you wish," I answered as demurely as I could. He opened it, and for
"Do you wish me to stay so long?" I asked, for my heart grew cold at the
see. You work the helm." And, with a warning look and his finger on his
"Did you write all this, Mrs. Harker?"
"Have you written since your first letter to our friend Mr. Peter
whom you wrong, or how; and I may not tell. Woe is me! I may not tell.
the Zoölogical Gardens a young one may have got loose, or one be bred
study zoöphagy!"
desktop@desktop-VirtualBox:~$ wc -l /home/desktop/Documents/Books/pride-and-prejudice.txt
14904 /home/desktop/Documents/Books/pride-and-prejudice.txt
desktop@desktop-VirtualBox:~$ wc -l /home/desktop/Documents/Books/dracula.txt
15860 /home/desktop/Documents/Books/dracula.txt
desktop@desktop-VirtualBox:~$ sort -k 2 /home/desktop/Documents/Books/dracula.txt
t
```

Question 4

```

desktop@desktop-VirtualBox: ~/Documents/Csv
Wheaties;G;C;100;3;1;200;3;17;3;110;25;1;1;1;51.592193
Wheaties Honey Gold;G;C;110;2;1;200;1;16;8;60;25;1;1;0.75;36.187559
desktop@desktop-VirtualBox:~/Documents/Csv$ cat cereal.csv | tr ';' ' '
name,mfr,type,calories,protein,fat,sodium,fiber,carbo,sugars,potass,vitamins,shelf,weight,cups,rating
String,Categorical,Categorical,Int,Int,Int,Int,Float,Float,Int,Int,Int,Int,Float,Float,Float
100% Bran,N,C,70,4,1,130,10,5,6,280,25,3,1,0.33,68.402973
100% Natural Bran,Q,C,120,3,5,15,2,8,8,135,0,3,1,1,33.983679
All-Bran,K.C.70.4.1.260.9.7.5.320.25.3.1.0.33.59.425505

desktop@desktop-VirtualBox: ~/Documents/Books
desktop@desktop-VirtualBox:~/Documents/Books$ grep "project" dracula.txt
from the horses of the coach by the light of the lamps, and projected
studded with large iron nails, and set in a projecting doorway of
using every projection and inequality move downwards with considerable
the Whitby vernacular--actually project over where the sustaining cliff
desktop@desktop-VirtualBox:~/Documents/Books$

```

Question 5

```

desktop@desktop-VirtualBox: ~/Documents/Csv
Wheaties;G;C;100;3;1;200;3;17;3;110;25;1;1;1;51.592193
Wheaties Honey Gold;G;C;110;2;1;200;1;16;8;60;25;1;1;0.75;36.187559
desktop@desktop-VirtualBox:~/Documents/Csv$ cat cereal.csv | tr ';' ' '
name,mfr,type,calories,protein,fat,sodium,fiber,carbo,sugars,potass,vitamins,shelf,weight,cups,rating
String,Categorical,Categorical,Int,Int,Int,Int,Float,Float,Int,Int,Int,Int,Float,Float,Float
100% Bran,N,C,70,4,1,130,10,5,6,280,25,3,1,0.33,68.402973
100% Natural Bran,Q,C,120,3,5,15,2,8,8,135,0,3,1,1,33.983679

desktop@desktop-VirtualBox: ~/Documents/Csv
desktop@desktop-VirtualBox:~/Documents/Csv$ awk -F';' '{print $1,$NF}' cars.csv
Car Origin
STRING CAT
Chevrolet Chevelle Malibu US
Buick Skylark 320 US

desktop@desktop-VirtualBox: ~/Documents/Csv
desktop@desktop-VirtualBox:~/Documents/Csv$ awk -F';' '{OFS=" made in "}{print $1,$NF}' cars.csv

```

Question 6

```
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
desktop@desktop-VirtualBox:~/Documents/Csv$ grep "/bin/bash" /etc/passwd
root:x:0:0:root:/root:/bin/bash
desktop:x:1000:1000:desktop,,,:/home/desktop:/bin/bash
desktop@desktop-VirtualBox:~/Documents/Csv$ grep "/bin/bash" /etc/passwd | wc -l
2
desktop@desktop-VirtualBox:~/Documents/Csv$ grep "ford" cars.csv | wc -l
0
desktop@desktop-VirtualBox:~/Documents/Csv$ grep "ford" cars.csv
desktop@desktop-VirtualBox:~/Documents/Csv$ grep -c "/bin/bash" /etc/passwd
2
desktop@desktop-VirtualBox:~/Documents/Csv$ grep -l 'ford' cars.csv
desktop@desktop-VirtualBox:~/Documents/Csv$ grep -i 'ford' cars.csv
Ford Torino;17.0;8;302.0;140.0;3449.;10.5;70;US
Ford Galaxie 500;15.0;8;429.0;198.0;4341.;10.0;70;US
Ford Torino (sw);0;8;351.0;153.0;4034.;11.0;70;US
Ford Mustang Mach-E;202.0;0;302.0;140.0;3449.;10.5;70;US
desktop@desktop-VirtualBox: ~/Documents/Csv
desktop@desktop-VirtualBox:~/Documents/Csv$ grep -i 'ford' cars.csv | wc -l
53
desktop@desktop-VirtualBox:~/Documents/Csv$
```