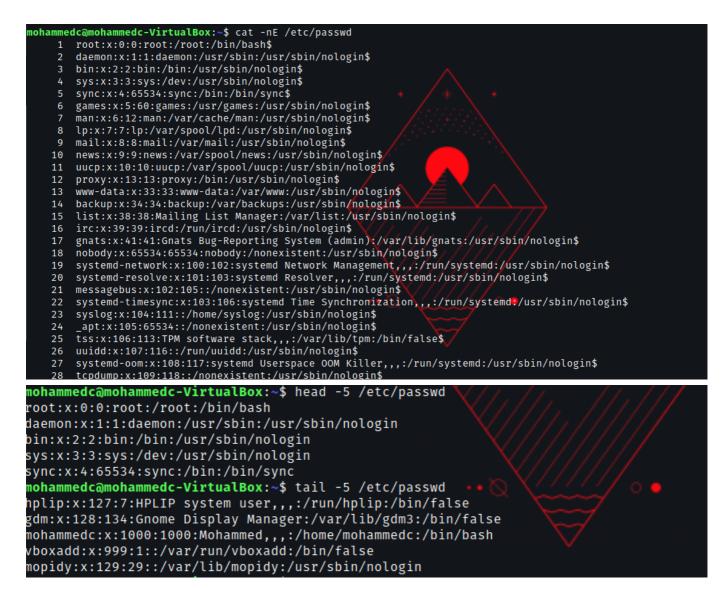
# Lab 7

```
mohammedc@mohammedc-VirtualBox:~$ cat /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
games:x:5:60:games:/usr/games:/usr/sbin/nologin
 man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7: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
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
 nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-network:x:100:102:systemd Network Management,,,:/run/systemd:/usr/sbin/nologinsystemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologinmessagebus:x:102:105::/nonexistent:/usr/sbin/nologin
 systemd-timesync:x:103:106:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
  syslog:x:104:111::/home/syslog:/usr/sbin/nologin
 apt:x:105:65534::/nonexistent:/usr/sbin/nologin
tss:x:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
uuidd:x:107:116::/run/uuidd:/usr/sbin/nologin
 systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
 tcpdump:x:109:118::/nonexistent:/usr/sbin/nologin
                 autoind.v.110.110.Avahi autoin
avahi-autoind:v:110:119:Avahi autoin daeman :/var/lih/avahi-autoind:/usr/sh
avahi-autoipd:x:110:119:Avahi autoin daeman,,;/var/lib/avahi-autoind:/usr/sbin/nologin
usbmux:x:111:46:usbmux daeman,,;/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,;/var/lib/misc:/usr/sbin/nologin
kernoops:x:113:65534:Kernel Oops Tracking Daeman,,;/:/usr/sbin/nologin
avahi:x:114:121:Avahi mDNS daeman,,;/run/avahi-daeman:/usr/sbin/nologin
cups-pk-helper:x:115:122:user for cups-pk-helper service,,:/home/cups-pk-helper:/usr/sbin/nologin
rtkit:x:116:123:RealtimeKit,,;/proc:/usr/sbin/nologin
whoopsie:x:117:124::/nonexistent:/bin/false
sssd:x:118:125:SSSD system user ://ar/lib/sss:/usr/sbin/nologin
whoopsie:x:11/:124::/nonexistent:/Din/ratse
sssd:x:118:125:SSSD system user,,:/var/lib/sss:/usr/sbin/nologin
speech-dispatcher:x:119:29:Speech Dispatcher,,:/run/speech-dispatcher:/bin/false
fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
colord:x:123:130:colord colour management daemon,,;/var/lib/colord:/usr/sbin/nologin
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
pulse:x:125:132:PulseAudio daemon,,;/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
hplip:x:127:7:HPLIP system user,,;/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
mohammedc:x:1000:1000:Mohammed,,,;/home/mohammedc:/bin/bash
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
mopidy:x:129:29::/var/lib/mopidy:/usr/sbin/nologin
mohammedc@mohammedc-VirtualBox:~$ tac /etc/passwd
mopidy:x:129:29::/var/lib/mopidy:/usr/sbin/nologin
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
mohammedc:x:1000:1000:Mohammed,,,;/home/mohammedc:/bin/bash
vboxadd:x:999:1::/var/run/vboxadd:/bin/false
mohammedc:x:1000:1000:Mohammed,,,:/home/mohammedc:/bin/bash
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
 pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
```



```
mohammedc@mohammedc-VirtualBox:~$ cut -d ':' -f 1 /etc/passwd
root
daemon
bin
sys
sync
gameSy
mohammedc@mohammedc-VirtualBox:~$ cut -d ':' -f1,7 /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
```

```
mohammedc@mohammedc-VirtualBox:~$ cut -d ':' -f1,7 --output delimiter=' => ' /etc/passwd
rootdelimiter= => /bin/bash
daemondelimiter= => /usr/sbin/nologin
bindelimiter= => /usr/sbin/nologin
sysdelimiter= => /usr/sbin/nologin
syncdelimiter= => /bin/sync
gamesdelimiter= => /usr/sbin/nologin
mohammedc@mohammedc-VirtualBox:~$ cut -d ',' --complement -s -f3 /etc/passwd
systemd-network:x:100:102:systemd Network Management,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,:/run/systemd:/usr/sbin/nologin
systemd-timesync:x:103:106:systemd Time Synchronization,,:/run/systemd:/usr/sbin/nologin
tss:x:106:113:TPM software stack,,:/var/lib/tpm:/bin/false
systemd-oom:x:108:117:systemd Userspace OOM Killer,:/run/systemd:/usr/sbin/nologin
avahi-autoind:x:110:119:Avahi autoin daemon ::/var/lib/avahi-autoind:/usr/sbin/nologin
```

# Question 3

```
nohammedc@mohammedc-VirtualBox:-$ curl -s https://cis106.com/assets/shopping.txt -o shopping.txt
nohammedc@mohammedc-VirtualBox:-$ curl -s https://cis106.com/assets/tasks.txt -o tasks.txt
nohammedc@mohammedc-VirtualBox:-$ cd Documents/Books$ wc -m dracula.txt
80834 dracula.txt
nohammedc@mohammedc-VirtualBox:-/Documents/Books$ wc -w pride-and-prejudice.txt
130412 pride-a
```

```
|ohammedc-VirtualBox:~$ cd Documents/Csv
 nohammedcეmohammedc-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,Int,Float,Float,Int,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

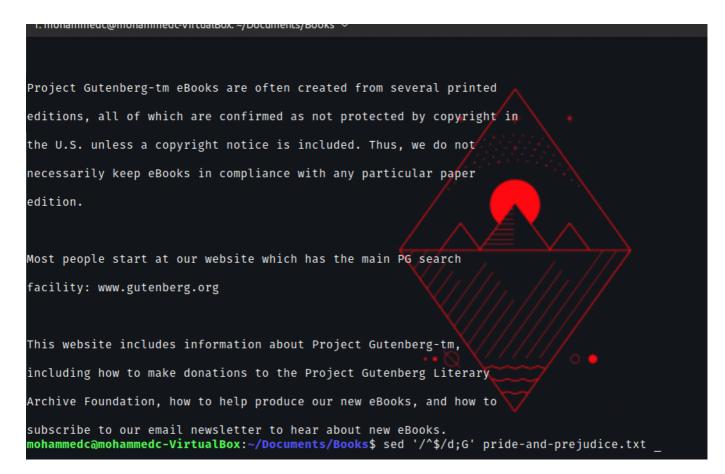
All-Bran,K,C,70,4,1,260,9,7,5,320,25,3,1,0.33,59.425505

All-Bran with Fytra Fiber K C 50 4 0 140 14 8 0 330 25 3 1 0 5 93 704912
wheatles noney dota,d,c,lld,z,l,zdd,l,ld,a,od,z3,l,l,d./3,30
mohammedc@mohammedc-VirtualBox:~/Documents/Csv$ cd ../Books/
mohammedc@mohammedc-VirtualBox:~/Documents/Books$ grep "love" pride-and-prejudice.txt
by allowance" and "loving with personal love." This distinction applies
to their best work than in the case of those others who are loved
proper thing to love them. And in the sect--fairly large and yet
All the minor passages--the loves of Jane and Bingley, the advent <mark>of</mark>
aversion to actual love. I do not know whether the all-grasping hand of
his falling in love at all is not extremely probable. Here again I
injured in disposition, and thoroughly in love. As for his being in
love, Elizabeth has given as just an exposition of the causes of that anybody who can read between lines will not find the lovers'
ladies with whom it might be a pleasure to fall in love; there are at
Grant. I should have been most in love with Beatrix and Argemone; I
  'So much <mark>love</mark> and eloquence"
  _may_ fall in love with one of them, and therefore you must visit him as
persuade you at last. I was sure you loved your girls too well to
for your sakes we would do anything. Lydia, my love, though you _are_
dancing was a certain step towards falling in love; and very lively
way to be very much in love; but she considered with pleasure that it
very few of us who have heart enough to be really in love without
in love as much as she chooses."
imagination is very rapid; it jumps from admiration to love, from love
Jane, make haste and tell us; make haste, my love.
   hammedc@mohammedc-VirtualBox:~/Documents/Books$ grep -Ewn 'love|hate' pride
:by allowance" and "loving with personal love." This distinction applies
5.proper thing to love them. And in the sect--fairly large and yet
6:aversion to actual love. I do not know whether the all-grasping hand of
6:his falling in love at all is not extremely probable. Here again I
8:injured in disposition, and thoroughly in love. As for his being in
9:love, Elizabeth has given as just an exposition of the causes of that
0:ladies with whom it might be a pleasure to fall in love; there are at
4:Grant. I should have been most in love with Beatrix and Argemone; I
5:"So much love and eloquence"
6:_may_ fall in love with one of them, and therefore you must visit him as
3:for your sakes we would do anything. Lydia, my love, though you are
                                                                                            'love|hate' pride-and-prejudice.txt
     The state of the state of them, and therefore you must visit him to state of them, and therefore you must visit him to state of the your sakes we would do anything. Lydia, my love, though you are danning was a certain step towards falling in love; and very lively strong, said he, "I must have you dance. I hate to see you sway to be very much in love; but she considered with pleasure that it very few of us who have heart enough to be really in love without in love as much as she chooses."
      :in love as much as she chooses."
:imagination is very rapid; it jumps from admiration to love, from love
:Jane, make haste and tell us; make haste, my love."
:brother Gardiner's in town so much in love with her, that my
:discovered the efficacy of poetry in driving away love!"
:"I have been used to consider poetry as the _food_ of love," said Darcy.
:"Of a fine, stout, healthy love it may. Everything nourishes what is
:be a great loss to _me_ to have many such acquaintance. I dearly love a
:"And _your_ defect is a propensity to hate everybody."
:to-day. Lydia, my love, ring the bell. I must speak to Hill this
:him to write to you at all, and very hypocritical. I hate such false
 nohammedc@mohammedc-VirtualBox:~/Documents/Books$ grep -E "^[A-Z]<mark>|^</mark>[0-9]" dracula.txt
This eBook is for the use of anyone anywhere in the United States and
Title: Dracula
Author: Bram Stoker
 Release Date: October, 1995 [eBook #345]
 Language: English
 Produced by: Chuck Greif and the Online Distributed Proofreading Team
CHAPTER I. Jonathan Harker's Journal
 CHAPTER II. Jonathan Harker's Journal
CHAPTER III. Jonathan Harker's Journal
CHAPTER IV. Jonathan Harker's Journal
CHAPTER V. Letters—Lucy and Mina
<mark>C</mark>HAPTER VI. Mina Murraý's Journal
<mark>C</mark>HAPTER VII. Cutting from "The Dailygraph," 8 August
```



```
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editions, all of which are confirmed as not protected by copyright in
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edition.
Most people start at our website which has the main PG search
facility: www.gutenberg.org.
This website includes information about Project Gutenberg™,
including how to make donations to the Project Gutenberg Literary
Archive Foundation, how to help produce our new eBooks, and how to
subscribe to our email newsletter to hear about new eBooks.
mohammedc@mohammedc-VirtualBox:~/Documents/Books$ sed 's/Dracula/Alucard/g' dracula.txt
```

```
mohammedc@mohammedc-VirtualBox:~$ sed G /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
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7: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
```



```
mohammedc@mohammedc-VirtualBox:~$ grep "/bin/bash" /etc/passwd | wc -l

mohammedc@mohammedc-VirtualBox:~$ grep "/sbin/nologin" /etc/passwd | wc -l

40
mohammedc@mohammedc-VirtualBox:~$ cd Documents/Csv
mohammedc@mohammedc-VirtualBox:~/Documents/Csv$ grep -i 'ford' cars.csv | wc -l

53
```