



دانشکده مهندسی کامپیوتر

آزمایشگاه سیستم عامل

تمرین جلسه هشتم

استاد : دکتر شیخی

پوریا رحیمی (۹۹۵۲۱۲۸۹)

Q1)

```
rahimi_99521289@99521289: ~/Desktop/cloner/HW8
GNU nano 6.2 input.txt *
1 2 3
5 9 7
2 2 5
3 8 1
6 5 8

File Name to Write: input.txt
^G Help      M-D DOS Format  M-A Append     M-B Backup File
^C Cancel    M-M Mac Format  M-P Prepend    ^T Browse
```



rahimi_99521289@99521289: ~/Desktop/cloner/HW8



```
rahimi_99521289@99521289:~/Desktop/cloner/HW8$ touch input.txt
```

```
rahimi_99521289@99521289:~/Desktop/cloner/HW8$ nano input.txt
```

```
rahimi_99521289@99521289:~/Desktop/cloner/HW8$ awk 'BEGIN {sum=0} {sum+=$2} END {printf"%d\n" , sum}' input.txt
```

```
26
```

```
rahimi_99521289@99521289:~/Desktop/cloner/HW8$ awk 'BEGIN {sum=0;num=0} $1>2 {sum+=$3;num+=1} END {print sum/num}' input.txt
```

```
5.33333
```

```
rahimi_99521289@99521289:~/Desktop/cloner/HW8$
```

Q2)

```
rahimi_99521289@99521289: ~/Desktop/cloner/HW8
rahimi_99521289@99521289:~/Desktop/cloner/HW8$ awk -F: '$3 >= 100 && /^[a-k]/ {print $1}' /etc/passwd
avahi-autoipd
dnsmasq
kernoops
avahi
cups-pk-helper
colord
geoclue
gnome-initial-setup
hplip
gdm
rahimi_99521289@99521289:~/Desktop/cloner/HW8$ awk -F: '$3 >= 500 && /^[a-k]/ {print $1}' /etc/passwd
rahimi_99521289@99521289:~/Desktop/cloner/HW8$
```

Q3)

```
rahimi_99521289@99521289: ~  
rahimi_99521289@99521289:~$ ls -al  
total 91768  
drwxr-x--- 20 rahimi_99521289 rahimi_99521289 4096 May 10 16:54 .  
drwxr-xr-x  3 root            root            4096 Feb 22 12:51 ..  
-rw-rw-r--  1 rahimi_99521289 rahimi_99521289  506 Apr 11 11:29 badlogins.txt  
-rw-----  1 rahimi_99521289 rahimi_99521289 12921 May 10 17:27 .bash_history  
-rw-r--r--  1 rahimi_99521289 rahimi_99521289  220 Feb 22 12:51 .bash_logout  
-rw-r--r--  1 rahimi_99521289 rahimi_99521289 3771 Feb 22 12:51 .bashrc  
drwx----- 17 rahimi_99521289 rahimi_99521289 4096 May  9 16:58 .cache  
drwx----- 18 rahimi_99521289 rahimi_99521289 4096 Mar 31 18:51 .config  
drwxr-xr-x  4 rahimi_99521289 rahimi_99521289 4096 Apr 15 05:02 Desktop  
drwxr-xr-x  2 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 Documents  
drwxr-xr-x  2 rahimi_99521289 rahimi_99521289 4096 May  9 16:58 Downloads  
-rw-rw-r--  1 rahimi_99521289 rahimi_99521289   95 Apr 11 11:59 ex.txt  
drwx-----  2 rahimi_99521289 rahimi_99521289 4096 May 10 16:53 .gnupg  
-rw-rw-r--  1 rahimi_99521289 rahimi_99521289 93814424 Feb 14 04:40 google-chrome-stable_current_amd64.deb  
-rw-rw-r--  1 rahimi_99521289 rahimi_99521289  155 Mar  3 21:15 grade.txt  
drwxrwxr-x  4 rahimi_99521289 rahimi_99521289 4096 Feb 23 01:13 .java  
-rw-----  1 rahimi_99521289 rahimi_99521289   20 May  2 18:22 .lessht  
drwx-----  3 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 .local  
drwxr-xr-x  2 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 Music  
-rw-r--r--  1 rahimi_99521289 rahimi_99521289  310 May 10 16:54 .pam_environment  
-rw-rw-r--  1 rahimi_99521289 rahimi_99521289 10240 May  2 18:20 people.tar.gz  
-rw-rw-r--  1 rahimi_99521289 rahimi_99521289  1016 May  2 18:19 people.txt  
drwxr-xr-x  3 rahimi_99521289 rahimi_99521289 4096 Feb 24 00:44 Pictures  
drwx-----  3 rahimi_99521289 rahimi_99521289 4096 Feb 22 13:28 .pki  
-rw-r--r--  1 rahimi_99521289 rahimi_99521289  807 Feb 22 12:51 .profile  
drwxr-xr-x  2 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 Public  
drwxrwxr-x  8 rahimi_99521289 rahimi_99521289 4096 Apr 26 22:43 PycharmProjects  
drwx-----  7 rahimi_99521289 rahimi_99521289 4096 Feb 23 23:30 snap  
drwx-----  2 rahimi_99521289 rahimi_99521289 4096 Feb 22 13:07 .ssh  
-rw-r--r--  1 rahimi_99521289 rahimi_99521289    0 Feb 22 13:15 .sudo_as_admin_successful  
drwxr-xr-x  2 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 Templates  
-rw-rw-r--  1 rahimi_99521289 rahimi_99521289   20 May  2 18:39 test.txt  
drwxr-xr-x  2 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 Videos  
drwxrwxr-x  3 rahimi_99521289 rahimi_99521289 4096 Mar  1 13:13 .vscode  
-rw-rw-r--  1 rahimi_99521289 rahimi_99521289  177 Feb 23 00:25 .wget-hsts
```

```
rahimi_99521289@99521289: ~  
-rw-rw-r-- 1 rahimi_99521289 rahimi_99521289 155 Mar 3 21:15 grade.txt  
drwxrwxr-x 4 rahimi_99521289 rahimi_99521289 4096 Feb 23 01:13 .java  
-rw----- 1 rahimi_99521289 rahimi_99521289 20 May 2 18:22 .lessht  
drwx----- 3 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 .local  
drwxr-xr-x 2 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 Music  
-rw-r--r-- 1 rahimi_99521289 rahimi_99521289 310 May 10 16:54 .pam_environment  
-rw-rw-r-- 1 rahimi_99521289 rahimi_99521289 10240 May 2 18:20 people.tar.gz  
-rw-rw-r-- 1 rahimi_99521289 rahimi_99521289 1016 May 2 18:19 people.txt  
drwxr-xr-x 3 rahimi_99521289 rahimi_99521289 4096 Feb 24 00:44 Pictures  
drwx----- 3 rahimi_99521289 rahimi_99521289 4096 Feb 22 13:28 .pki  
-rw-r--r-- 1 rahimi_99521289 rahimi_99521289 807 Feb 22 12:51 .profile  
drwxr-xr-x 2 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 Public  
drwxrwxr-x 8 rahimi_99521289 rahimi_99521289 4096 Apr 26 22:43 PycharmProjects  
drwx----- 7 rahimi_99521289 rahimi_99521289 4096 Feb 23 23:30 snap  
drwx----- 2 rahimi_99521289 rahimi_99521289 4096 Feb 22 13:07 .ssh  
-rw-r--r-- 1 rahimi_99521289 rahimi_99521289 0 Feb 22 13:15 .sudo_as_admin_successful  
drwxr-xr-x 2 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 Templates  
-rw-rw-r-- 1 rahimi_99521289 rahimi_99521289 20 May 2 18:39 test.txt  
drwxr-xr-x 2 rahimi_99521289 rahimi_99521289 4096 Feb 22 12:58 Videos  
drwxrwxr-x 3 rahimi_99521289 rahimi_99521289 4096 Mar 1 13:13 .vscode  
-rw-rw-r-- 1 rahimi_99521289 rahimi_99521289 177 Feb 23 00:25 .wget-hsts  
rahimi_99521289@99521289:~$ ls -al | awk '$6 == "May" || $6 == "Apr" {print $9}'  
.  
badlogins.txt  
.bash_history  
.cache  
Desktop  
Downloads  
ex.txt  
.gnupg  
.lessht  
.pam_environment  
people.tar.gz  
people.txt  
PycharmProjects  
test.txt  
rahimi_99521289@99521289:~$
```