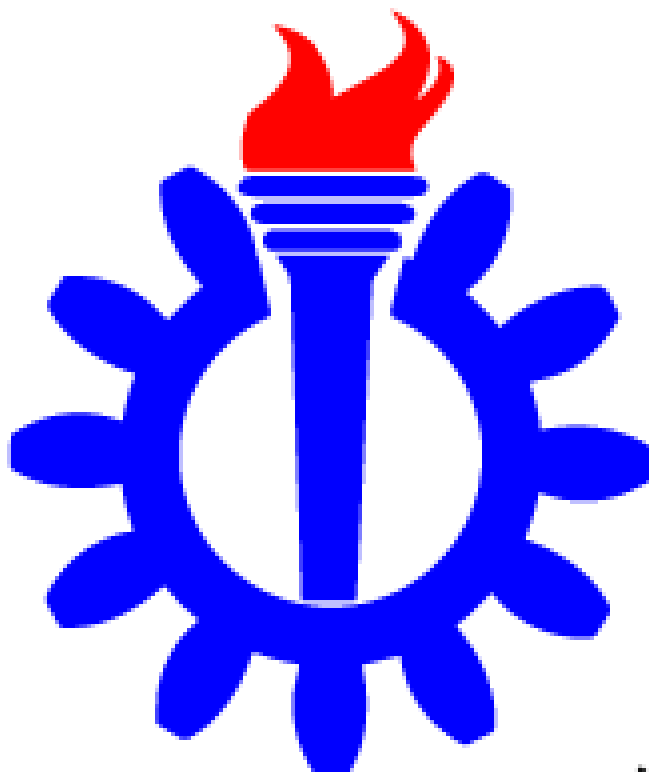


بسم الله الرحمن الرحيم



دانشگاه علم و صنعت ایران

مصد عرفان زارع زردینر

تدریس 8 در سرآزمایشگاه سیستم عامل

استاد شیفر

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الف

```
erfanzare-98411432@ubuntu:~$ cat > testq1.txt
2 15 18
13 7 14
6 9 12
22 14 1
19 14 6
erfanzare-98411432@ubuntu:~$ cat testq1.txt
2 15 18
13 7 14
6 9 12
22 14 1
19 14 6
erfanzare-98411432@ubuntu:~$ awk '{sum+=$2} END printf "%d\n",sum' testq1.txt
awk: line 1: syntax error at or near printf
erfanzare-98411432@ubuntu:~$ awk '{sum+=$2} END {printf "%d\n",sum}' testq1.txt
59
```

ب

```
erfanzare-98411432@ubuntu:~$ awk 'BEGIN { C=0} {$1>2 ; sum+=$3;c++; } END { pr
ntf "%d\n", sum/c }' testq1.txt
10
```

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```
erfanzare-98411432@ubuntu:/etc$ sudo awk 'BEGIN {fs=":"} $3>500 && /[a-k]/ {prin
tf "%s \n",$1}' passwd
list:x:38:38:Mailing
gnats:x:41:41:Gnats
systemd-timesync:x:100:102:systemd
systemd-network:x:101:103:systemd
systemd-bus-proxy:x:103:105:systemd
lightdm:x:108:114:Light
avahi-autoipd:x:110:119:Avahi
avahi:x:111:120:Avahi
colord:x:113:123:colord
hplip:x:115:7:HPLIP
kernoops:x:116:65534:Kernel
```

```

erfanzare-98411432@ubuntu:~$ ls -l --time=atime
total 84
drwxr-xr-x 2 erfanzare-98411432 erfanzare-98411432 4096 Nov 22 20:13 Desktop
drwxr-xr-x 2 erfanzare-98411432 erfanzare-98411432 4096 Nov 7 21:16 Documents
drwxr-xr-x 2 erfanzare-98411432 erfanzare-98411432 4096 Nov 7 21:16 Downloads
-rw-r--r-- 1 erfanzare-98411432 erfanzare-98411432 8980 Nov 7 21:16 examples.desktop
drwxr-xr-x 2 erfanzare-98411432 erfanzare-98411432 4096 Nov 7 21:16 Music
drwxr-xr-x 2 erfanzare-98411432 erfanzare-98411432 4096 Nov 7 21:16 Pictures
drwxr-xr-x 2 erfanzare-98411432 erfanzare-98411432 4096 Nov 7 21:16 Public
-rw-rw-r-- 1 erfanzare-98411432 erfanzare-98411432 218 Nov 15 10:36 s1.sh
-rw-rw-r-- 1 erfanzare-98411432 erfanzare-98411432 233 Nov 14 07:42 s1.sh.save
-rw-rw-r-- 1 erfanzare-98411432 erfanzare-98411432 233 Nov 14 07:42 s1.sh.save.1
-rw-rw-r-- 1 erfanzare-98411432 erfanzare-98411432 313 Nov 15 10:23 s2.sh
-rw-rw-r-- 1 erfanzare-98411432 erfanzare-98411432 117 Nov 15 10:43 s3.sh
drwxr-xr-x 2 erfanzare-98411432 erfanzare-98411432 4096 Nov 22 20:13 Templates
-rw-rw-r-- 1 erfanzare-98411432 erfanzare-98411432 128 Nov 12 21:10 test1.sh
-rw-rw-r-- 1 erfanzare-98411432 erfanzare-98411432 171 Nov 8 20:26 test.bash
-rw-rw-r-- 1 erfanzare-98411432 erfanzare-98411432 39 Nov 22 20:46 testq1.txt
-rw-rw-r-- 1 erfanzare-98411432 erfanzare-98411432 171 Nov 8 20:26 test.sh
-rw-rw-r-- 1 erfanzare-98411432 erfanzare-98411432 29 Nov 8 02:02 test.txt
drwxr-xr-x 2 erfanzare-98411432 erfanzare-98411432 4096 Nov 7 21:16 Videos
erfanzare-98411432@ubuntu:~$

```