



دانشکده مهندسی کامپیوتر

آزمایشگاه سیستم عامل

تمرین جلسه سوم

استاد : دکتر شیخی

پوریا رحیمی (۹۹۵۲۱۲۸۹)

Q1)

```
rahimi_99521289@99521289: ~  
rahimi_99521289@99521289:~$ cd ~  
rahimi_99521289@99521289:~$ echo -e "StudentId\tLastname\tFirstname\tScore" > grade.txt  
rahimi_99521289@99521289:~$ cat grade.txt  
StudentId      Lastname      Firstname      Score  
rahimi_99521289@99521289:~$ echo -e "99521289\tSamantha\tAnderson\t17" >> grade.txt  
rahimi_99521289@99521289:~$ echo -e "99521289\tNicholas\tReynolds\t20" >> grade.txt  
rahimi_99521289@99521289:~$ echo -e "99174251\tIsabelle\tThompson\t19" >> grade.txt  
rahimi_99521289@99521289:~$ echo -e "40052148\tBenjamin\tMitchell\t18" >> grade.txt  
rahimi_99521289@99521289:~$ cat grade.txt  
StudentId      Lastname      Firstname      Score  
99521289       Samantha      Anderson       17  
99521289       Nicholas      Reynolds       20  
99174251       Isabelle     Thompson       19  
40052148       Benjamin     Mitchell       18  
rahimi_99521289@99521289:~$
```

Q2)

```
rahimi_99521289@99521289: ~  
rahimi_99521289@99521289:~$ cd ~  
rahimi_99521289@99521289:~$ cat > test.txt  
Sunday  
Monday  
Tuesday  
Wednesday  
Thursday  
Friday  
Saturday  
^C  
rahimi_99521289@99521289:~$ cat test.txt  
Sunday  
Monday  
Tuesday  
Wednesday  
Thursday  
Friday  
Saturday  
rahimi_99521289@99521289:~$ cat /etc/passwd >> test.txt  
rahimi_99521289@99521289:~$ cat test.txt  
Sunday  
Monday  
Tuesday  
Wednesday  
Thursday  
Friday  
Saturday  
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/nologin  
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin  
messagebus: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:106:112:TPM software stack,,,:/var/lib/tpm:/bin/false  
uuidd:x:107:115:./run/uuidd:/usr/sbin/nologin
```

Q3)

```

rahimi_99521289@99521289: ~
rahimi_99521289@99521289:~$ cd /etc/
rahimi_99521289@99521289:/etc$ ls -la
.
..
acpi
adduser.conf
alsa
alternatives
anacrontab
apg.conf
apm
apparmor
apparmor.d
appport
appstream.conf
apt
avahi
bash.bashrc
bash_completion
bash_completion.d
bindresvport.blacklist
binfmt.d
bluetooth
brlapi.key
brltty
brltty.conf
ca-certificates
ca-certificates.conf
ca-certificates.conf.dpkg-old
chatscripts
consolefile
console-setup
cracklib
cron.d
cron.daily
cron.hourly
rahimi_99521289@99521289:/etc$ cd ..
rahimi_99521289@99521289:/$ cd ~
rahimi_99521289@99521289:~$ ls /etc/ | grep "init"
init
init.d
initramfs-tools
rahimi_99521289@99521289:~$

```

cron.monthly	groff	ld.so.conf	networkd-dispatcher	rc5.d	systemd
crontab	group	ld.so.conf.d	NetworkManager	rc6.d	terminfo
cron.weekly	group-	legal	networks	rcS.d	thermald
cups	grub.d	libao.conf	newt	resolv.conf	thunderbird
cupshelpers	gshadow	libaudit.conf	nftables.conf	rmt	timezone
dbus-1	gshadow-	libblockdev	nsswitch.conf	rpc	tmpfiles.d
dconf	gss	libnl-3	openvpn	rsyslog.conf	ubuntu-advantage
debconf.conf	gtk-2.0	libpaper.d	opt	rsyslog.d	ucf.conf
debian_version	gtk-3.0	libreoffice	os-release	rygel.conf	udev
default	hdparm.conf	locale.alias	PackageKit	sane.d	udisks2
deluser.conf	host.conf	locale.gen	pam.conf	security	ufw
depmod.d	hostid	localtime	pam.d	selinux	update-manager
dhcp	hostname	logcheck	papersize	sensors3.conf	update-motd.d
dictionaries-common	hosts	login.defs	passwd	sensors.d	update-notifier
dpkg	hosts.allow	logrotate.conf	passwd-	services	UPower
e2scrub.conf	hosts.deny	logrotate.d	pcmcia	sgml	usb_modeswitch.conf
emacs	hp	lsb-release	perl	shadow	usb_modeswitch.d
environment	ifplugd	machine-id	pki	shadow-	vdpa-wrapper.cfg
environment.d	init	magic	pm	shells	vim
ethertypes	init.d	magic.mime	pnm2ppa.conf	skel	vmware-tools
firefox	initramfs-tools	mailcap	polkit-1	snmp	vtrgb
fonts	inputrc	mailcap.order	ppp	speech-dispatcher	vulkan
fprintd.conf	insserv.conf.d	manpath.config	profile	ssh	wgetrc
fstab	ipp-usb	mime.types	profile.d	ssl	wpa_supplicant
fuse.conf	iproute2	mke2fs.conf	protocols	subgid	X11
fwupd	issue	ModemManager	pulse	subgid-	xattr.conf
gai.conf	issue.net	modprobe.d	.pwd.lock	subuid	xdg
gassoc	.java	modules	python3	subuid-	xml
gdb	java-11-openjdk	modules-load.d	python3.10	sudo.conf	zsh_command_not_found
gdm3	kernel	mtab	rc0.d	sudoers	
geoclue	kernel-img.conf	nanorc	rc1.d	sudoers.d	
ghostscript	kerneloops.conf	netconfig	rc2.d	sudo_logsrvd.conf	
glvnd	ldap	netplan	rc3.d	sysctl.conf	
gnome	ld.so.cache	network	rc4.d	sysctl.d	

Q4)

```
rahimi_99521289@99521289: ~  
rahimi_99521289@99521289:~$ head -n 10 /etc/passwd | cut -d ':' -f 1-7 --output-delimiter=$'\t'  
root      x          0          0      root      /root      /bin/bash  
daemon    x          1          1      daemon    /usr/sbin  /usr/sbin/nologin  
bin        x          2          2      bin        /bin        /usr/sbin/nologin  
sys        x          3          3      sys        /dev        /usr/sbin/nologin  
sync       x          4          65534  sync       /bin        /bin/sync  
games      x          5          60     games      /usr/games  /usr/sbin/nologin  
man        x          6          12     man        /var/cache/man /usr/sbin/nologin  
lp         x          7          7      lp         /var/spool/lpd /usr/sbin/nologin  
mail       x          8          8      mail       /var/mail   /usr/sbin/nologin  
news       x          9          9      news       /var/spool/news /usr/sbin/nologin  
rahimi_99521289@99521289:~$
```

Q5)

```
rahimi_99521289@99521289: ~  
rahimi_99521289@99521289:~$ tail -n 10 /etc/group | cut -d ':' -f 1|wc -c  
83  
rahimi_99521289@99521289:~$
```

≡ consfile	62	ftkit:x:123:
≡ crontab	63	whoopsie:x:124:
⚙ debconf.conf	64	sssd:x:125:
≡ debian_version	65	nm-openvpn:x:126:
⚙ deluser.conf	66	scanner:x:127:saned
⚙ e2scrub.conf	67	saned:x:128:
≡ environment	68	colord:x:129:
≡ ethertypes	69	geoclue:x:130:
⚙ fprintd.conf	70	pulse:x:131:
≡ fstab	71	pulse-access:x:132:
⚙ fuse.conf	72	gdm:x:133:
⚙ gai.conf	73	lxd:x:134:rahimi_99521289
≡ gassoc	74	rahimi_99521289:x:1000:
! group	75	sambashare:x:135:rahimi_99521289
≡ group-	76	