

Számítógép architektúrák

BSc

1. Gyak.
2023. 10. 10

Készítette:

Dongó Petra Bsc

Szak: GÉIK

Neptunkód: A3U8XV

Miskolc, 2023

1. feladat –

```
detra@Detra:~$ pwd  
/home/detra
```

2. feladat – így tovább

```
detra@Detra:~$ cd /  
detra@Detra:/$ |
```

3. feladat

```
detra@Detra:/$ cd ~  
detra@Detra:~$ |
```

4. feladat

```
detra@Detra:~$ cd /root/  
-bash: cd: /root/: Permission denied  
detra@Detra:~$ |
```

5. feladat

```
detra@Detra:~$ cd /etc  
detra@Detra:/etc$ |
```

6. feladat

```
detra@Detra:/etc$ cd ..  
detra@Detra:/$ |
```

7. feladat

```
detra@Detra:/$ ls  
bin  dev  home  lib    lib64  lost+found  mnt  proc  run  snap  sys  usr  
boot etc  init  lib32  libx32  media      opt  root  sbin  srv   tmp  var  
detra@Detra:/$ |
```

8. feladat

```
detra@Detra:/$ ls /etc
PackageKit
X11
adduser.conf
alternatives
apparmor
apparmor.d
appport
apt
bash.bashrc
bash_completion
bash_completion.d
bindresvport.blacklist
binfmt.d
byobu
ca-certificates
ca-certificates.conf
ca-certificates.conf.dpkg-old
console-setup
cron.d
cron.daily
cron.hourly
cron.monthly
cron.weekly
crontab
dbus-1
debconf.conf
debian_version
default
deluser.conf
depmod.d
dhcp
dPKG
e2scrub.conf
environment
ethertypes
fstab
fuse.conf
gai.conf
groff
group
group-
gshadow
gshadow-
gss
hdparm.conf
host.conf
hostname
hosts
init.d
inputrc
iproute2
issue
issue.net
kernel
ld.so.cache
ld.so.conf
ld.so.conf.d
ldap
legal
libaudit.conf
libnl-3
locale.alias
locale.gen
localtime
logcheck
login.defs
logrotate.conf
logrotate.d
lsb-release
machine-id
magic
magic.mime
manpath.config
mime.types
mke2fs.conf
modprobe.d
modules
modules-load.d
mtab
nanorc
netconfig
netplan
networkd-dispatcher
networks
newt
nftables.conf
nsswitch.conf
opt
os-release
pam.conf
pam.d
passwd
passwd-
perl
pm
polkit-1
profile
profile.d
protocols
python3
python3.10
rc0.d
rc1.d
rc2.d
rc3.d
rc4.d
rc5.d
rc6.d
rcS.d
resolv.conf
rmt
rpc
rsyslog.conf
rsyslog.d
screenrc
security
selinux
services
shadow
shadow-
shells
skel
ssh
ssl
subgid
subgid-
subuid
subuid-
sudo.conf
sudo_logsrvd.conf
sudoers
sudoers.d
sysctl.conf
sysctl.d
systemd
terminfo
timezone
tmpfiles.d
ubuntu-advantage
ucf.conf
udev
ufw
update-manager
update-motd.d
vim
vtrgb
wgetrc
wsl.conf
xattr.conf
xdg
zsh_command_not_found
```

```
detra@Detra:/$ ls /var/log
alternatives.log  bootstrap.log  dmesg  dmesg.2.gz  dpkg.log  journal  private  ubuntu-advantage.log  wtmp
apt               bttmp         dmesg.0  dmesg.3.gz  faillog  kern.log  syslog  unattended-upgrades
auth.log          dist-upgrade  dmesg.1.gz  dmesg.4.gz  installer  lastlog  ubuntu-advantage-timer.log  upgrade-policy-changed.log
detra@Detra:/$
```

9. feladat

```
detra@Detra:/$ cd ~
detra@Detra:~$ mkdir Teszt
detra@Detra:~$
```

10. feladat

```
detra@Detra:~$ mkdir T1 T2
detra@Detra:~$
```

11. feladat

```
detra@Detra:~$ tree
.
├── T1
├── T2
├── Teszt
├── matek
├── snap
│   └── tree
│       ├── 18
│       ├── common
│       └── current -> 18

```

9 directories, 0 files
detra@Detra:~\$ |

12. feladat

```
detra@Detra:~$ mkdir -p Teszt/Unix/Linux/Debian
detra@Detra:~$ |
```

```
detra@Detra:~$ tree
.
├── T1
├── T2
├── Teszt
│   ├── Unix
│   │   ├── Linux
│   │   └── Debian
├── matek
├── snap
│   └── tree
│       ├── 18
│       ├── common
│       └── current -> 18

```

12 directories, 0 files
detra@Detra:~\$ |

13. feladat

```
detra@Detra:~$ mv Teszt/Unix/Linux/Debian Teszt/Unix/Linux/Deb
detra@Detra:~$ tree
```

```
.
├── T1
├── T2
├── Teszt
│   └── Unix
│       └── Linux
│           └── Deb
├── matek
├── snap
│   └── tree
│       ├── 18
│       ├── common
│       └── current -> 18
```

```
12 directories, 0 files
```

```
detra@Detra:~$ |
```

14. feladat

```
detra@Detra:~$ mv Teszt/Unix/Linux/Deb T1/
detra@Detra:~$ tree
```

```
.
├── T1
│   └── Deb
├── T2
├── Teszt
│   └── Unix
│       └── Linux
├── matek
├── snap
│   └── tree
│       ├── 18
│       ├── common
│       └── current -> 18
```

```
12 directories, 0 files
```

```
detra@Detra:~$ |
```

15. feladat

```
detra@Detra:~$ rm -Rf T1
detra@Detra:~$ tree
.
├── T2
├── Teszt
│   ├── Unix
│   └── Linux
├── matek
├── snap
│   └── tree
│       ├── 18
│       ├── common
│       └── current -> 18
10 directories, 0 files
detra@Detra:~$ |
```

16. feladat

```
detra@Detra:~$ rm -Rf Teszt
detra@Detra:~$ tree
.
├── T2
├── matek
├── snap
│   └── tree
│       ├── 18
│       ├── common
│       └── current -> 18
7 directories, 0 files
detra@Detra:~$ |
```

17. feladat

```
detra@Detra:~$ tree
```

```
.
├── T2
├── matek
├── snap
│   └── tree
│       ├── 18
│       ├── common
│       └── current -> 18
```

```
7 directories, 0 files
```

```
detra@Detra:~$ |
```

```
detra@Detra:~$ ls
```

```
T2 matek snap
```

```
detra@Detra:~$ |
```

18. feladat

```
detra@Detra:~$ ls -l /etc
```

```
total 720
```

```
drwxr-xr-x 2 root root 4096 May 1 23:35 PackageKit
drwxr-xr-x 4 root root 4096 May 1 23:35 X11
-rw-r--r-- 1 root root 3028 May 1 23:35 adduser.conf
drwxr-xr-x 2 root root 4096 May 1 23:35 alternatives
drwxr-xr-x 3 root root 4096 May 1 23:35 apparmor
drwxr-xr-x 8 root root 4096 May 1 23:35 apparmor.d
drwxr-xr-x 3 root root 4096 May 1 23:35 apport
drwxr-xr-x 8 root root 4096 May 1 23:36 apt
-rw-r--r-- 1 root root 2319 Jan 6 2022 bash.bashrc
-rw-r--r-- 1 root root 45 Nov 11 2021 bash_completion
drwxr-xr-x 2 root root 4096 May 1 23:35 bash_completion.d
-rw-r--r-- 1 root root 367 Dec 16 2020 bindresvport.blacklist
drwxr-xr-x 2 root root 4096 Apr 7 2022 binfmt.d
drwxr-xr-x 2 root root 4096 May 1 23:35 byobu
drwxr-xr-x 3 root root 4096 May 1 23:35 ca-certificates
-rw-r--r-- 1 root root 5532 May 1 23:35 ca-certificates.conf
-rw-r--r-- 1 root root 5529 May 1 23:35 ca-certificates.conf.dpkg-old
drwxr-xr-x 2 root root 4096 May 1 23:35 console-setup
drwxr-xr-x 2 root root 4096 May 1 23:35 cron.d
drwxr-xr-x 2 root root 4096 May 1 23:35 cron.daily
drwxr-xr-x 2 root root 4096 May 1 23:35 cron.hourly
drwxr-xr-x 2 root root 4096 May 1 23:35 cron.monthly
drwxr-xr-x 2 root root 4096 May 1 23:35 cron.weekly
-rw-r--r-- 1 root root 1136 Mar 23 2022 crontab
drwxr-xr-x 4 root root 4096 May 1 23:35 dbus-1
-rw-r--r-- 1 root root 2969 Feb 20 2022 debconf.conf
-rw-r--r-- 1 root root 13 Aug 22 2021 debian_version
drwxr-xr-x 2 root root 4096 May 1 23:35 default
-rw-r--r-- 1 root root 604 Sep 16 2018 deluser.conf
drwxr-xr-x 2 root root 4096 May 1 23:35 depmod.d
drwxr-xr-x 4 root root 4096 May 1 23:35 dhcp
drwxr-xr-x 4 root root 4096 May 1 23:35 dpkg
-rw-r--r-- 1 root root 685 Jan 8 2022 e2scrub.conf
-rw-r--r-- 1 root root 106 May 1 23:35 environment
-rw-r--r-- 1 root root 1816 Dec 27 2019 ethertypes
-rw-r--r-- 1 root root 37 May 1 23:34 fstab
-rw-r--r-- 1 root root 694 Mar 23 2022 fuse.conf
```

19. feladat

```
detra@Detra:~$ ls -l /etc/*.conf
-rw-r--r-- 1 root root 3028 May  1 23:35 /etc/adduser.conf
-rw-r--r-- 1 root root 5532 May  1 23:35 /etc/ca-certificates.conf
-rw-r--r-- 1 root root 2969 Feb 20 2022 /etc/debconf.conf
-rw-r--r-- 1 root root  604 Sep 16 2018 /etc/deluser.conf
-rw-r--r-- 1 root root  685 Jan  8 2022 /etc/e2scrub.conf
-rw-r--r-- 1 root root  694 Mar 23 2022 /etc/fuse.conf
-rw-r--r-- 1 root root 2584 Feb  3 2022 /etc/gai.conf
-rw-r--r-- 1 root root 4436 Dec 15 2020 /etc/hdparm.conf
-rw-r--r-- 1 root root  92 Oct 15 2021 /etc/host.conf
-rw-r--r-- 1 root root  34 Dec 16 2020 /etc/ld.so.conf
-rw-r--r-- 1 root root 191 Mar 17 2022 /etc/libaudit.conf
-rw-r--r-- 1 root root 592 Jan 24 2022 /etc/logrotate.conf
-rw-r--r-- 1 root root 744 Jan  8 2022 /etc/mke2fs.conf
-rwxr-xr-x 1 root root 228 Mar 23 2022 /etc/nftables.conf
-rw-r--r-- 1 root root 510 May  1 23:35 /etc/nsswitch.conf
-rw-r--r-- 1 root root 552 Aug 12 2020 /etc/pam.conf
lrwxrwxrwx 1 root root 20 Oct  9 15:41 /etc/resolv.conf -> /mnt/wsl/resolv.conf
-rw-r--r-- 1 root root 1382 Dec 24 2021 /etc/rsyslog.conf
-rw-r--r-- 1 root root 4573 Feb 14 2022 /etc/sudo.conf
-rw-r--r-- 1 root root 9390 Feb 14 2022 /etc/sudo_logsrvd.conf
-rw-r--r-- 1 root root 2355 Feb 25 2022 /etc/sysctl.conf
-rw-r--r-- 1 root root 1260 Jun 16 2020 /etc/ucf.conf
-rw-r--r-- 1 root root  21 Oct  6 14:09 /etc/wsl.conf
-rw-r--r-- 1 root root  681 Mar 23 2022 /etc/xattr.conf
detra@Detra:~$ |
```

20. feladat

```
detra@Detra:~$ ls -l /etc/p*
-rw-r--r-- 1 root root 552 Aug 12 2020 /etc/pam.conf
-rw-r--r-- 1 root root 1418 Oct  6 14:11 /etc/passwd
-rw-r--r-- 1 root root 1415 Oct  6 14:10 /etc/passwd-
-rw-r--r-- 1 root root 582 Oct 15 2021 /etc/profile
-rw-r--r-- 1 root root 2932 Apr  1 2013 /etc/protocols
```


21. feladat

```
detra@Detra:~$ ls -l /etc/*f
-rw-r--r-- 1 root root 3028 May  1 23:35 /etc/adduser.conf
-rw-r--r-- 1 root root 5532 May  1 23:35 /etc/ca-certificates.conf
-rw-r--r-- 1 root root 2969 Feb 20 2022 /etc/debconf.conf
-rw-r--r-- 1 root root 604 Sep 16 2018 /etc/deluser.conf
-rw-r--r-- 1 root root 685 Jan  8 2022 /etc/e2scrub.conf
-rw-r--r-- 1 root root 694 Mar 23 2022 /etc/fuse.conf
-rw-r--r-- 1 root root 2584 Feb  3 2022 /etc/gai.conf
-rw-r--r-- 1 root root 4436 Dec 15 2020 /etc/hdparm.conf
-rw-r--r-- 1 root root  92 Oct 15 2021 /etc/host.conf
-rw-r--r-- 1 root root  34 Dec 16 2020 /etc/ld.so.conf
-rw-r--r-- 1 root root 191 Mar 17 2022 /etc/libaudit.conf
-rw-r--r-- 1 root root 592 Jan 24 2022 /etc/logrotate.conf
-rw-r--r-- 1 root root 744 Jan  8 2022 /etc/mke2fs.conf
-rwxr-xr-x 1 root root 228 Mar 23 2022 /etc/nftables.conf
-rw-r--r-- 1 root root 510 May  1 23:35 /etc/nsswitch.conf
-rw-r--r-- 1 root root 552 Aug 12 2020 /etc/pam.conf
lrwxrwxrwx 1 root root  20 Oct  9 15:41 /etc/resolv.conf -> /mnt/wsl/resolv.conf
-rw-r--r-- 1 root root 1382 Dec 24 2021 /etc/rsyslog.conf
-rw-r--r-- 1 root root 4573 Feb 14 2022 /etc/sudo.conf
-rw-r--r-- 1 root root 9390 Feb 14 2022 /etc/sudo_logsrvd.conf
-rw-r--r-- 1 root root 2355 Feb 25 2022 /etc/sysctl.conf
-rw-r--r-- 1 root root 1260 Jun 16 2020 /etc/ucf.conf
-rw-r--r-- 1 root root  21 Oct  6 14:09 /etc/wsl.conf
-rw-r--r-- 1 root root 681 Mar 23 2022 /etc/xattr.conf

/etc/groff:
total 8
-rw-r--r-- 1 root root 1048 Mar 23 2022 man.local
-rw-r--r-- 1 root root 1042 Mar 23 2022 mdoc.local
detra@Detra:~$ |
```

22. feladat

```
detra@Detra:~$ ls -l /etc/p?s*d
-rw-r--r-- 1 root root 1418 Oct  6 14:11 /etc/passwd
detra@Detra:~$ |
```

23. feladat

```
detra@Detra:~$ ls -a
.  ..  .bash_history  .bash_logout  .bashrc  .cache  .motd_shown  .profile  .sudo_as_admin_successful  T2  matek  snap
detra@Detra:~$ |
```

24. feladat

```
detra@Detra:~$ ls -l /etc/?[an]*
-rw-r--r-- 1 root root 2319 Jan  6 2022 /etc/bash.bashrc
-rw-r--r-- 1 root root  45 Nov 11 2021 /etc/bash_completion
-rw-r--r-- 1 root root 5532 May  1 23:35 /etc/ca-certificates.conf
-rw-r--r-- 1 root root 5529 May  1 23:35 /etc/ca-certificates.conf.dpkg-old
-rw-r--r-- 1 root root 106 May  1 23:35 /etc/environment
-rw-r--r-- 1 root root 2584 Feb  3 2022 /etc/gai.conf
-rw-r--r-- 1 root root 1748 Jan  6 2022 /etc/inputrc
-r--r--r-- 1 root root  33 Oct  6 14:10 /etc/machine-id
-rw-r--r-- 1 root root 111 Mar 24 2022 /etc/magic
-rw-r--r-- 1 root root 111 Mar 24 2022 /etc/magic.mime
-rw-r--r-- 1 root root 5217 Mar 17 2022 /etc/manpath.config
-rw-r--r-- 1 root root 11204 Feb  9 2022 /etc/nanorc
-rw-r--r-- 1 root root 552 Aug 12 2020 /etc/pam.conf
-rw-r--r-- 1 root root 1418 Oct  6 14:11 /etc/passwd
-rw-r--r-- 1 root root 1415 Oct  6 14:10 /etc/passwd-
-rw-r--r-- 1 root root 681 Mar 23 2022 /etc/xattr.conf
```

25. feladat

```
detra@Detra:~$ ls -l /etc/?[!an]*
-rw-r--r-- 1 root root 3028 May 1 23:35 /etc/adduser.conf
-rw-r--r-- 1 root root 367 Dec 16 2020 /etc/bindresvport.blacklist
-rw-r--r-- 1 root root 1136 Mar 23 2022 /etc/crontab
-rw-r--r-- 1 root root 2969 Feb 20 2022 /etc/debconf.conf
-rw-r--r-- 1 root root 13 Aug 22 2021 /etc/debian_version
-rw-r--r-- 1 root root 604 Sep 16 2018 /etc/deluser.conf
-rw-r--r-- 1 root root 685 Jan 8 2022 /etc/e2scrub.conf
-rw-r--r-- 1 root root 1816 Dec 27 2019 /etc/ethertypes
-rw-r--r-- 1 root root 37 May 1 23:34 /etc/fstab
-rw-r--r-- 1 root root 694 Mar 23 2022 /etc/fuse.conf
-rw-r--r-- 1 root root 773 Oct 6 14:11 /etc/group
-rw-r--r-- 1 root root 722 Oct 6 14:10 /etc/group-
-rw-r----- 1 root shadow 649 Oct 6 14:11 /etc/gshadow
-rw-r----- 1 root shadow 598 Oct 6 14:10 /etc/gshadow-
-rw-r--r-- 1 root root 4436 Dec 15 2020 /etc/hdparm.conf
-rw-r--r-- 1 root root 92 Oct 15 2021 /etc/host.conf
-rw-r--r-- 1 root root 6 Oct 9 15:41 /etc/hostname
-rw-r--r-- 1 root root 396 Oct 9 15:41 /etc/hosts
-rw-r--r-- 1 root root 26 Feb 16 2023 /etc/issue
-rw-r--r-- 1 root root 19 Feb 16 2023 /etc/issue.net
-rw-r--r-- 1 root root 14359 Oct 9 15:41 /etc/ld.so.cache
-rw-r--r-- 1 root root 34 Dec 16 2020 /etc/ld.so.conf
-rw-r--r-- 1 root root 267 Oct 15 2021 /etc/legal
-rw-r--r-- 1 root root 191 Mar 17 2022 /etc/libaudit.conf
-rw-r--r-- 1 root root 2996 Mar 4 2022 /etc/locale.alias
-rw-r--r-- 1 root root 9458 May 1 23:35 /etc/locale.gen
lrwxrwxrwx 1 root root 35 Oct 9 15:41 /etc/localtime -> /usr/share/zoneinfo/Europe/Budapest
-rw-r--r-- 1 root root 10734 Nov 11 2021 /etc/login.defs
-rw-r--r-- 1 root root 592 Jan 24 2022 /etc/logrotate.conf
-rw-r--r-- 1 root root 104 Feb 16 2023 /etc/lsb-release
-rw-r--r-- 1 root root 72029 Mar 21 2022 /etc/mime.types
-rw-r--r-- 1 root root 744 Jan 8 2022 /etc/mke2fs.conf
-rw-r--r-- 1 root root 195 May 1 23:35 /etc/modules
lrwxrwxrwx 1 root root 19 May 1 23:35 /etc/mtab -> ../proc/self/mounts
-rw-r--r-- 1 root root 767 Mar 24 2022 /etc/netconfig
-rw-r--r-- 1 root root 91 Oct 15 2021 /etc/networks
-rwxr-xr-x 1 root root 228 Mar 23 2022 /etc/nftables.conf
-rw-r--r-- 1 root root 510 May 1 23:35 /etc/nsswitch.conf
```

26. Feladat

```
Backups Cache Gash
detra@Detra:~$ ls /*|
```

27. feladat

```
detra@Detra:~$ mc
```

Left	File	Command	Options	Right				
.n	Name	Size	Modify time	.n	Name	Size	Modify time	
UP--DIR	UP--DIR	Oct 6 14:10	UP--DIR	UP--DIR	UP--DIR	Oct 6 14:10	UP--DIR	
.cache	4096	Oct 9 16:31	.cache	4096	Oct 9 16:31	.cache	4096	Oct 9 16:31
.config	4096	Oct 9 16:31	.config	4096	Oct 9 16:31	.config	4096	Oct 9 16:31
.local	4096	Oct 9 16:31	.local	4096	Oct 9 16:31	.local	4096	Oct 9 16:31
/T2	4096	Oct 9 15:57	/T2	4096	Oct 9 15:57	/T2	4096	Oct 9 15:57
/matek	4096	Oct 6 14:19	/matek	4096	Oct 6 14:19	/matek	4096	Oct 6 14:19
/snap	4096	Oct 9 16:01	/snap	4096	Oct 9 16:01	/snap	4096	Oct 9 16:01
.bash_history	55	Oct 6 19:13	.bash_history	55	Oct 6 19:13	.bash_history	55	Oct 6 19:13
.bash_logout	220	Oct 6 14:10	.bash_logout	220	Oct 6 14:10	.bash_logout	220	Oct 6 14:10
.bashrc	3771	Oct 6 14:10	.bashrc	3771	Oct 6 14:10	.bashrc	3771	Oct 6 14:10
.motd_shown	0	Oct 9 15:41	.motd_shown	0	Oct 9 15:41	.motd_shown	0	Oct 9 15:41
.profile	887	Oct 6 14:10	.profile	887	Oct 6 14:10	.profile	887	Oct 6 14:10
.sudo_as_admin_successful	0	Oct 9 15:59	.sudo_as_admin_successful	0	Oct 9 15:59	.sudo_as_admin_successful	0	Oct 9 15:59

UP--DIR 954G/1087G (94%)

Hint: Want your plain shell? Press C-o, and get back to MC with C-o again.

1Help 2Menu 3View 4Edit 5Copy 6RenMov 7Mkdir 8Delete 9PullDn 10Quit