

AdminLinux_Task3

Section 2:

Q1:

```
alaa@alaaHP:~/tmp$ cd ~
alaa@alaaHP:~$ history >> /tmp/commands.list
alaa@alaaHP:~$ cat /tmp/commands.list
1 sudo apt update
2 cd /home
3 git clone "git@github.com:Alaa-Ghita/Embedded-Linux.git"
4 sudo apt install git
5 cd /home
6 git clone "git@github.com:Alaa-Ghita/Embedded-Linux.git"
7 ssh-keygen -t ed25519 -C "your_email@example.com"
8 ssh-keygen -t ed25519 -C "alaa.ghita379@gmail.com"
9 git clone "git@github.com:Alaa-Ghita/Embedded-Linux.git"
10 git clone git@github.com:Alaa-Ghita/Embedded-Linux.git
11 git --version
12 git config --global user.email "alaa.ghita379@gmail.com"
13 git config --global user.name "AlaaGhita"
14 git clone git@github.com:Alaa-Ghita/Embedded-Linux.git
15 git clone https://github.com/Alaa-Ghita/Embedded-Linux.git
16 git clone git@github.com:Alaa-Ghita/Embedded-Linux.git
17 git clone "git@github.com:Alaa-Ghita/Embedded-Linux.git"
18 cd /home/alaa
19 git clone "git@github.com:Alaa-Ghita/Embedded-Linux.git"
20 git clone "git@github.com:Alaa-Ghita/Embedded-Linux.git~"
```

Q2:

The .profile file has been edited, but the changes didn't appear when switching from one user to another.

```
alaa@alaaHP:~$ tail -3 .profile
date
echo this is profile
alaa@alaaHP:~$
```

Q3:

The wc command shows the number of lines, words, characters, or bytes in a file or an output of another command.

```
alaa@alaaHP:~$ ls -al | wc -l
40
```

```
alaa@alaaHP:~$ history | wc -l
646
alaa@alaaHP:~$
```

Q4:

- a. It shows the content of filename2 only.

```
alaa@alaaHP:~$ cat .profile | cat .bashrc
# ~/.bashrc: executed by bash(1) for non-login shells.
# see /usr/share/doc/bash/examples/startup-files (in the package bash-doc)
# for examples

# If not running interactively, don't do anything
case $- in
    *i*) ;;
    *) return;;
esac

# don't put duplicate lines or lines starting with space in the history.
# See bash(1) for more options
HISTCONTROL=ignoreboth

# append to the history file, don't overwrite it
shopt -s histappend
```

```
alaa@alaaHP:~$ cat .bashrc | cat .profile
# ~/.profile: executed by the command interpreter for login shells.
# This file is not read by bash(1), if ~/.bash_profile or ~/.bash_login
# exists.
# see /usr/share/doc/bash/examples/startup-files for examples.
# the files are located in the bash-doc package.

# the default umask is set in /etc/profile; for setting the umask
# for ssh logins, install and configure the libpam-umask package.
#umask 022

# if running bash
if [ -n "$BASH_VERSION" ]; then
    # include .bashrc if it exists
    if [ -f "$HOME/.bashrc" ]; then
        . "$HOME/.bashrc"
    fi
fi
```

- b.** Only the rm command will execute and remove the file
- c.** It only displays the number 1, because ls is used to list the content of a directory not a file, and /etc/passwd is a file so it displays the directory this file only, which is in one line.

```
alaa@alaaHP:~$ ls /etc/passwd | wc -l
1
alaa@alaaHP:~$ ls /etc/passwd
/etc/passwd
alaa@alaaHP:~$
```

Q5:

```
bash: ./profile: No such file or directory
alaa@alaaHP:~/Embedded-Linux$ locate .profile
/etc/skel/.profile
/snap/core20/1974/etc/skel/.profile
/snap/core20/1974/usr/share/base-files/dot.profile
/snap/core20/1974/usr/share/base-files/dot.profile.md5sums
/snap/core20/1974/usr/share/lintian/profiles/dpkg/main.profile
/snap/core20/1974/usr/share/opensc/asepcos.profile
/snap/core20/1974/usr/share/opensc/authentic.profile
/snap/core20/1974/usr/share/opensc/cardos.profile
/snap/core20/1974/usr/share/opensc/cyberflex.profile
/snap/core20/1974/usr/share/opensc/entersafe.profile
/snap/core20/1974/usr/share/opensc/epass2003.profile
/snap/core20/1974/usr/share/opensc/flex.profile
/snap/core20/1974/usr/share/opensc/gids.profile
/snap/core20/1974/usr/share/opensc/gpk.profile
/snap/core20/1974/usr/share/opensc/ias_adele_admin1.profile
/snap/core20/1974/usr/share/opensc/ias_adele_admin2.profile
/snap/core20/1974/usr/share/opensc/ias_adele_common.profile
/snap/core20/1974/usr/share/opensc/iasecc.profile
/snap/core20/1974/usr/share/opensc/iasecc_admin_eid.profile
/snap/core20/1974/usr/share/opensc/iasecc_generic_oberthur.profile
/snap/core20/1974/usr/share/opensc/iasecc_generic_pki.profile
/snap/core20/1974/usr/share/opensc/incrypto34.profile
/snap/core20/1974/usr/share/opensc/isoApplet.profile
/snap/core20/1974/usr/share/opensc/jcop.profile
/snap/core20/1974/usr/share/opensc/miocos.profile
/snap/core20/1974/usr/share/opensc/muscle.profile
/snap/core20/1974/usr/share/opensc/myeid.profile
/snap/core20/1974/usr/share/opensc/oberthur.profile
/snap/core20/1974/usr/share/opensc/openpgp.profile
/snap/core20/1974/usr/share/opensc/pkcs15.profile
/snap/core20/1974/usr/share/opensc/rutoken.profile
/snap/core20/1974/usr/share/opensc/rutoken_ecp.profile
/snap/core20/1974/usr/share/opensc/rutoken_lite.profile
/snap/core20/1974/usr/share/opensc/sc-hsm.profile
```

Q6:

```
alaa@alaaHP:~$ stat /etc
  File: /etc
  Size: 12288          Blocks: 24          IO Block: 4096   directory
Device: 816h/2070d    Inode: 6291457      Links: 129
Access: (0755/drwxr-xr-x)  Uid: (  0/   root)   Gid: (  0/   root)
Access: 2023-12-09 18:56:54.414388863 +0200
Modify: 2023-12-08 12:19:40.891818803 +0200
Change: 2023-12-08 12:19:40.891818803 +0200
 Birth: 2023-11-23 15:48:52.663391540 +0200
alaa@alaaHP:~$ stat /
  File: /
  Size: 4096          Blocks: 8          IO Block: 4096   directory
Device: 816h/2070d    Inode: 2           Links: 20
Access: (0755/drwxr-xr-x)  Uid: (  0/   root)   Gid: (  0/   root)
Access: 2023-12-08 22:02:58.796440444 +0200
Modify: 2023-11-23 15:55:21.567401498 +0200
Change: 2023-11-23 15:55:21.567401498 +0200
 Birth: 2023-11-23 15:48:06.000000000 +0200
alaa@alaaHP:~$ stat /etc/hosts
  File: /etc/hosts
  Size: 221           Blocks: 8          IO Block: 4096   regular file
Device: 816h/2070d    Inode: 6291621     Links: 1
Access: (0644/-rw-r--r--)  Uid: (  0/   root)   Gid: (  0/   root)
Access: 2023-12-09 18:51:17.210380229 +0200
Modify: 2023-11-23 15:55:16.367401365 +0200
Change: 2023-11-23 15:55:16.367401365 +0200
 Birth: 2023-11-23 15:48:55.647391617 +0200
```

Q7:

```
alaa@alaaHP:~$ sudo ln -s /etc/passwd /boot
[sudo] password for alaa:
Sorry, try again.
[sudo] password for alaa:
alaa@alaaHP:~$ sudo ln -s /etc/passwd /boot
ln: failed to create symbolic link '/boot/passwd': File exists
```

```

alaa@alaaHP:/boot$ ls -l
total 186664
-rw-r--r-- 1 root root 275465 Jul 13 16:22 config-6.2.0-26-generic
-rw-r--r-- 1 root root 275553 Nov 2 19:02 config-6.2.0-37-generic
drwx----- 5 root root 4096 Jan 1 1970 efi
drwxr-xr-x 6 root root 4096 Nov 23 20:34 grub
lrwxrwxrwx 1 root root 27 Nov 23 20:32 initrd.img -> initrd.img-6.
-rw-r--r-- 1 root root 76888547 Dec 4 18:07 initrd.img-6.2.0-26-generic
-rw-r--r-- 1 root root 69609148 Dec 4 18:06 initrd.img-6.2.0-37-generic
lrwxrwxrwx 1 root root 27 Nov 23 15:48 initrd.img.old -> initrd.im
-rw-r--r-- 1 root root 182800 Feb 6 2022 memtest86+.bin
-rw-r--r-- 1 root root 184476 Feb 6 2022 memtest86+.elf
-rw-r--r-- 1 root root 184980 Feb 6 2022 memtest86+_multiboot.bin
lrwxrwxrwx 1 root root 11 Dec 9 22:28 passwd -> /etc/passwd
-rw----- 1 root root 7963097 Jul 13 16:22 System.map-6.2.0-26-generic

```

Q8:

No, because the same file exists when I made it with the soft link. But after changing the name and using sudo, I can make it.

```

alaa@alaaHP:~$ ln /etc/passwd /boot
ln: failed to create hard link '/boot/passwd': File exists
alaa@alaaHP:~$ ln /etc/passwd /boot/hard
ln: failed to create hard link '/boot/hard' => '/etc/passwd': Operation not permitted
alaa@alaaHP:~$ sudo ln /etc/passwd /boot/hard
alaa@alaaHP:~$ ls -l /boot
total 186668
-rw-r--r-- 1 root root 275465 Jul 13 16:22 config-6.2.0-26-generic
-rw-r--r-- 1 root root 275553 Nov 2 19:02 config-6.2.0-37-generic
drwx----- 5 root root 4096 Jan 1 1970 efi
drwxr-xr-x 6 root root 4096 Nov 23 20:34 grub
-rw-r--r-- 2 root root 2884 Dec 8 12:19 hard
lrwxrwxrwx 1 root root 27 Nov 23 20:32 initrd.img -> initrd.img-6.2.0-37-generic
-rw-r--r-- 1 root root 76888547 Dec 4 18:07 initrd.img-6.2.0-26-generic
-rw-r--r-- 1 root root 69609148 Dec 4 18:06 initrd.img-6.2.0-37-generic
lrwxrwxrwx 1 root root 27 Nov 23 15:48 initrd.img.old -> initrd.img-6.2.0-26-generic
-rw-r--r-- 1 root root 182800 Feb 6 2022 memtest86+.bin
-rw-r--r-- 1 root root 184476 Feb 6 2022 memtest86+.elf
-rw-r--r-- 1 root root 184980 Feb 6 2022 memtest86+_multiboot.bin
lrwxrwxrwx 1 root root 11 Dec 10 11:00 passwd -> /etc/passwd
-rw----- 1 root root 7963097 Jul 13 16:22 System.map-6.2.0-26-generic
-rw----- 1 root root 7976179 Nov 2 19:02 System.map-6.2.0-37-generic
lrwxrwxrwx 1 root root 24 Nov 23 20:32 vmlinuz -> vmlinuz-6.2.0-37-generic
-rw-r--r-- 1 root root 13770312 Nov 20 20:32 vmlinuz-6.2.0-26-generic
-rw----- 1 root root 13798728 Nov 2 19:04 vmlinuz-6.2.0-37-generic
lrwxrwxrwx 1 root root 24 Nov 23 20:32 vmlinuz.old -> vmlinuz-6.2.0-26-generic
alaa@alaaHP:~$

```

Q9:

```

alaa@alaaHP:~$ PS2=:
alaa@alaaHP:~$ echo \
:This is Alaa
This is Alaa
alaa@alaaHP:~$

```