

Rahma Farag – G2 – Nasr City

Lab 5

Question 1:

```
rahma@rahma-Lenovo:~$ ls /usr/bin > /tmp/commands.list
```

Question 2:

```
rahma@rahma-Lenovo:~/zipdir$ touch file1
```

```
rahma@rahma-Lenovo:~/zipdir$ ls
```

file1

```
rahma@rahma-Lenovo:~/zipdir$ gzip file1
```

```
rahma@rahma-Lenovo:~/zipdir$ ls
```

file1.gz

Question 4:

```
rahma@rahma-Lenovo:~/zipdir$ tar -cvf etc.tar /etc
```

```
rahma@rahma-Lenovo:~/zipdir$ ls
```

etc.tar file1.gz

Question 5:

```
rahma@rahma-Lenovo:~$ find /home/rahma -mtime -2
```

Question 6:

```
rahma@rahma-Lenovo:~$ find /etc -user root 2> /dev/null
```

Question 7:

```
rahma@rahma-Lenovo:~$ find /home/rahma -type d
```

Question 8:

```
rahma@rahma-Lenovo:~$ find / -name .profile 2> /dev/null
```

Question 9:

```
rahma@rahma-Lenovo:~$ file /etc/passwd /dev/pts/0 /etc /dev/sda
```

```
/etc/passwd: ASCII text
```

```
/dev/pts/0: character special (136/0)
```

```
/etc: directory
```

```
/dev/sda: block special (8/0)
```

Question 10:

```
rahma@rahma-Lenovo:~$ ls -ild / /etc /etc/hosts
```

```
2 drwxr-xr-x 20 root root 4096 Nov 2 18:00 /
```

```
1179649 drwxr-xr-x 130 root root 12288 Nov 6 09:23 /etc
```

```
1179813 -rw-r--r-- 1 root root 227 Nov 2 18:00 /etc/hosts
```

```
rahma@rahma-Lenovo:~$ ls -il /etc/hosts
```

```
1179813 -rw-r--r-- 1 root root 227 Nov 2 18:00 /etc/hosts
```

Question 11:

```
rahma@rahma-Lenovo:~$ cp /etc/passwd cppasswd
```

```
rahma@rahma-Lenovo:~$ diff /etc/passwd cppasswd
```

```
rahma@rahma-Lenovo:~$ cmp /etc/passwd cppasswd
```

```
rahma@rahma-Lenovo:~$ vi cppasswd
```

```
rahma@rahma-Lenovo:~$ cmp /etc/passwd cppasswd
```

```
cmp: EOF on /etc/passwd after byte 3039, line 51
```

```
rahma@rahma-Lenovo:~$ diff /etc/passwd cppasswd
```

```
51a52,53
```

```
>
```

```
> baduser2:x:1003:1004:Bad User2:/home/baduser2:/bin/sh
```

cmp - compare two files byte by byte	diff - compare files line by line
--------------------------------------	-----------------------------------

Question 12:

```
rahma@rahma-Lenovo:~$ sudo ln -s /etc/passwd /boot
```

```
rahma@rahma-Lenovo:~$ ls -ild /etc/passwd /boot/passwd
```

```
308 lrwxrwxrwx 1 root root 11 Nov 7 10:58 /boot/passwd -  
> /etc/passwd
```

```
1187517 -rw-r--r-- 1 root root 3039 Nov 4 15:34 /etc/passwd
```

Question 13:

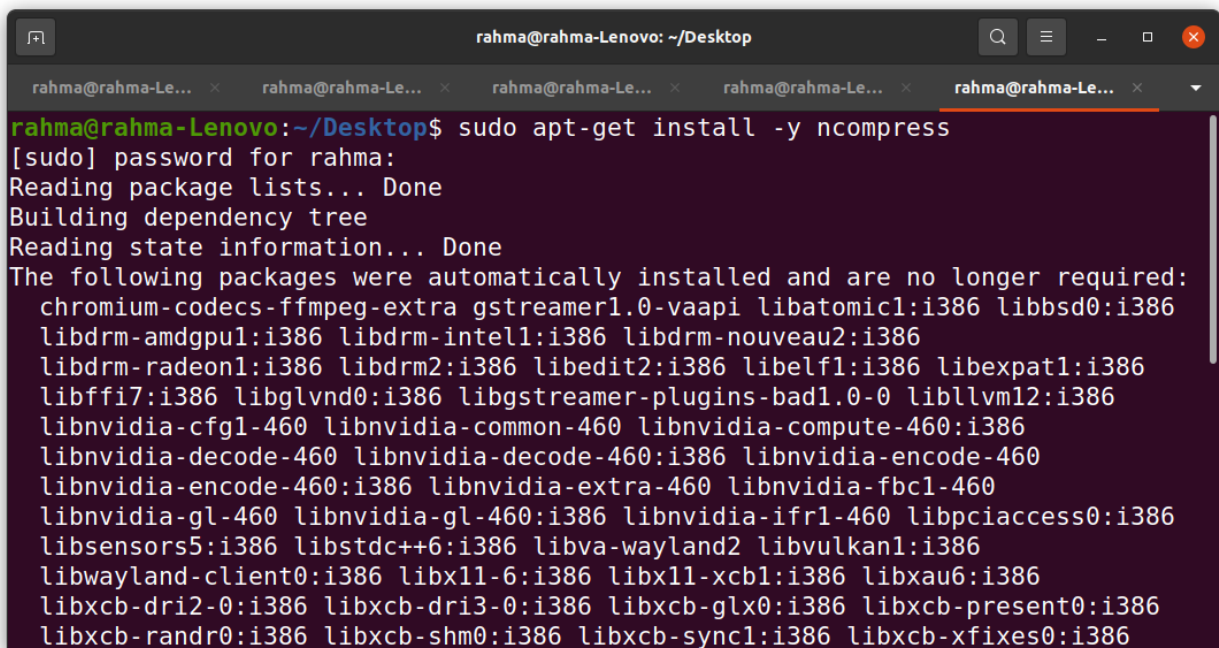
```
rahma@rahma-Lenovo:~$ ln /etc/passwd /boot
```

*ln: failed to create hard link '/boot/passwd' => '/etc/passwd':
Invalid cross-device link*

We can't as it is not in the same partition we can only hardlink files on the same partition

Lab 5 – part 1

Question 1:



```
rahma@rahma-Lenovo: ~/Desktop
rahma@rahma-Le... x  rahma@rahma-Le... x  rahma@rahma-Le... x  rahma@rahma-Le... x  rahma@rahma-Le... x
rahma@rahma-Lenovo:~/Desktop$ sudo apt-get install -y ncompress
[sudo] password for rahma:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libatomic1:i386 libbsd0:i386
libdrm-amdgpu1:i386 libdrm-intel1:i386 libdrm-nouveau2:i386
libdrm-radeon1:i386 libdrm2:i386 libedit2:i386 libelf1:i386 libexpat1:i386
libffi7:i386 libglvnd0:i386 libgstreamer-plugins-bad1.0-0 libllvm12:i386
libnvidia-cfg1-460 libnvidia-common-460 libnvidia-compute-460:i386
libnvidia-decode-460 libnvidia-decode-460:i386 libnvidia-encode-460
libnvidia-encode-460:i386 libnvidia-extra-460 libnvidia-fbc1-460
libnvidia-gl-460 libnvidia-gl-460:i386 libnvidia-ifrt1-460 libpciaccess0:i386
libsensors5:i386 libstdc++6:i386 libva-wayland2 libvulkan1:i386
libwayland-client0:i386 libx11-6:i386 libx11-xcb1:i386 libxau6:i386
libxcb-dri2-0:i386 libxcb-dri3-0:i386 libxcb-glx0:i386 libxcb-present0:i386
libxcb-randr0:i386 libxcb-shm0:i386 libxcb-sync1:i386 libxcb-xf86vm0:i386
```

```
sudo apt-get install -y ncompress
```

```
rahma@rahma-Lenovo: ~/Desktop
Unpacking ncompress (4.2.4.6-1) ...
Setting up ncompress (4.2.4.6-1) ...
Processing triggers for man-db (2.9.1-1) ...
rahma@rahma-Lenovo:~/Desktop$ sudo apt-get install -y ksh
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
 chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libatomic1:i386 libbsd0:i386
 libdrm-amdgpu1:i386 libdrm-intel1:i386 libdrm-nouveau2:i386
 libdrm-radeon1:i386 libdrm2:i386 libedit2:i386 libelf1:i386 libexpat1:i386
 libffi7:i386 libglvnd0:i386 libgstreamer-plugins-bad1.0-0 libllvm12:i386
 libnvidia-cfg1-460 libnvidia-common-460 libnvidia-compute-460:i386
 libnvidia-decode-460 libnvidia-decode-460:i386 libnvidia-encode-460
 libnvidia-encode-460:i386 libnvidia-extra-460 libnvidia-fbc1-460
 libnvidia-gl-460 libnvidia-gl-460:i386 libnvidia-ifr1-460 libpciaccess0:i386
 libsensors5:i386 libstdc++6:i386 libva-wayland2 libvulkan1:i386
 libwayland-client0:i386 libx11-6:i386 libx11-xcb1:i386 libxau6:i386
```

```
sudo apt-get install -y ksh
```

Question 2:

```
rahma@rahma-Lenovo:~/zipdir$ touch fileg fileb
```

```
rahma@rahma-Lenovo:~/zipdir$ gzip fileg
```

```
rahma@rahma-Lenovo:~/zipdir$ bzip2 fileb
```

```
rahma@rahma-Lenovo:~/zipdir$ ls
```

```
arc2.tar cppasswd etc.tar fileb.bz2 fileg.gz
```

```
rahma@rahma-Lenovo:~/zipdir$ gunzip fileg.gz
```

```
rahma@rahma-Lenovo:~/zipdir$ bunzip2 fileb.bz2
```

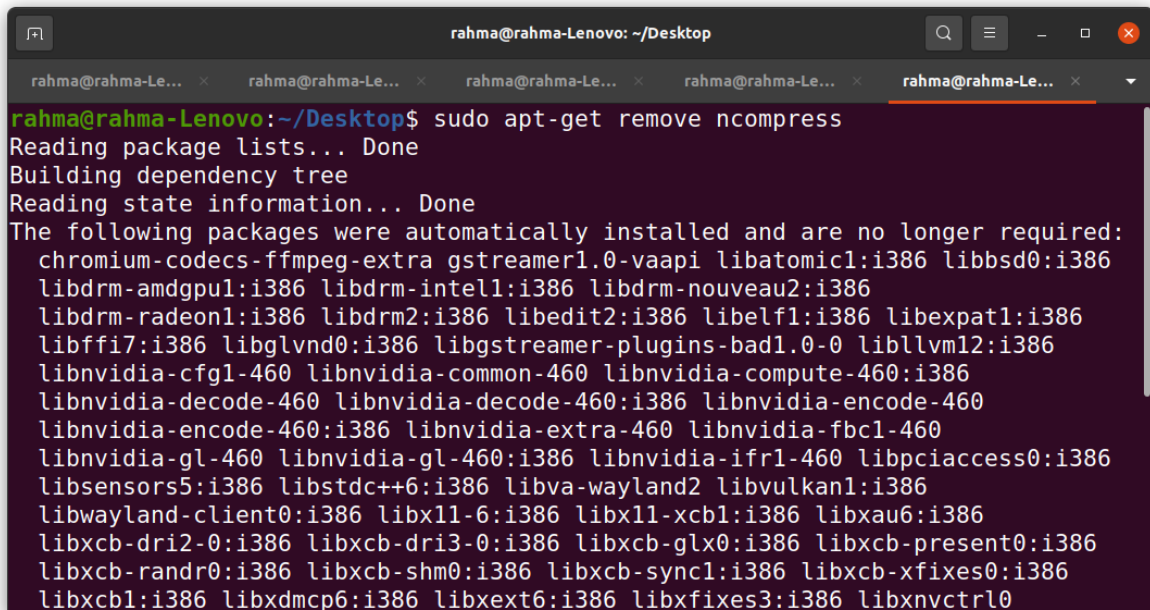
```
rahma@rahma-Lenovo:~/zipdir$ ls
```

```
arc2.tar cppasswd etc.tar fileb file
```

Question 3:

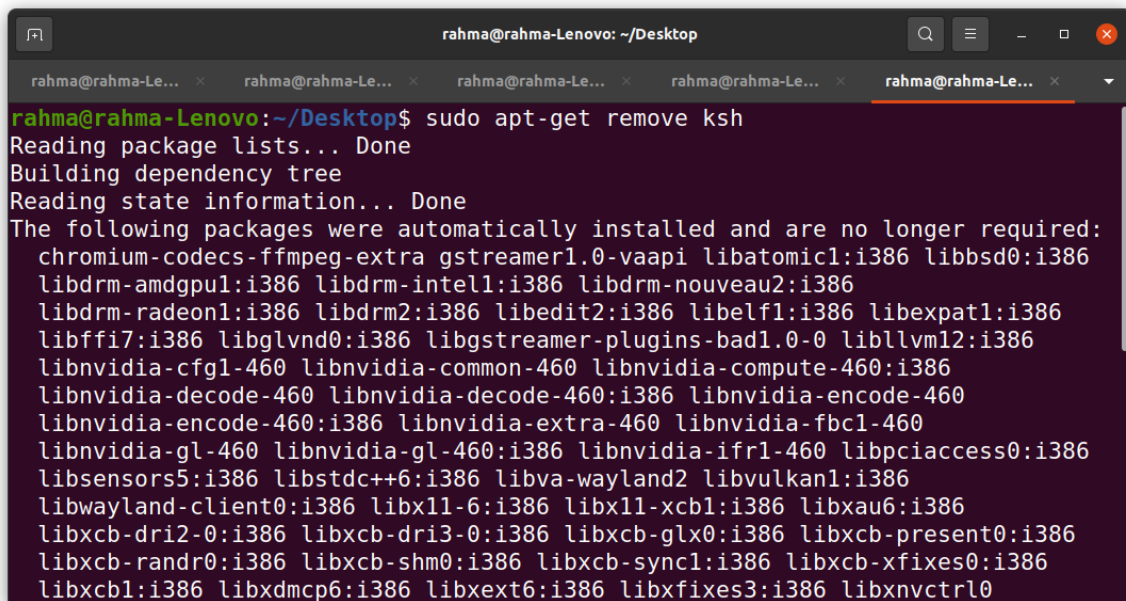
rahma@rahma-Lenovo:~\$ sudo find / -perm 777 -type d 2>/dev/null

Question 4:

A terminal window titled 'rahma@rahma-Lenovo: ~/Desktop' showing the command 'sudo apt-get remove ncompress'. The output indicates that several packages were automatically installed and are no longer required. The list of packages includes chromium-codecs-ffmpeg-extra, gstreamer1.0-vaapi, libatomic1:i386, libbsd0:i386, libdrm-amdgpu1:i386, libdrm-intel1:i386, libdrm-nouveau2:i386, libdrm-radeon1:i386, libdrm2:i386, libedit2:i386, libelf1:i386, libexpat1:i386, libffi7:i386, libglvnd0:i386, libgstreamer-plugins-bad1.0-0, libllvm12:i386, libnvidia-cfg1-460, libnvidia-common-460, libnvidia-compute-460:i386, libnvidia-decode-460, libnvidia-decode-460:i386, libnvidia-encode-460, libnvidia-encode-460:i386, libnvidia-extra-460, libnvidia-fbc1-460, libnvidia-gl-460, libnvidia-gl-460:i386, libnvidia-ifrl-460, libpciaccess0:i386, libsensors5:i386, libstdc++6:i386, libva-wayland2, libvulkan1:i386, libwayland-client0:i386, libx11-6:i386, libx11-xcb1:i386, libxau6:i386, libxcb-dri2-0:i386, libxcb-dri3-0:i386, libxcb-glx0:i386, libxcb-present0:i386, libxcb-randr0:i386, libxcb-shm0:i386, libxcb-sync1:i386, libxcb-xfixes0:i386, libxcb1:i386, libxdmcp6:i386, libxext6:i386, libxfixes3:i386, and libxvctrl0.

```
rahma@rahma-Lenovo:~/Desktop$ sudo apt-get remove ncompress
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libatomic1:i386 libbsd0:i386
libdrm-amdgpu1:i386 libdrm-intel1:i386 libdrm-nouveau2:i386
libdrm-radeon1:i386 libdrm2:i386 libedit2:i386 libelf1:i386 libexpat1:i386
libffi7:i386 libglvnd0:i386 libgstreamer-plugins-bad1.0-0 libllvm12:i386
libnvidia-cfg1-460 libnvidia-common-460 libnvidia-compute-460:i386
libnvidia-decode-460 libnvidia-decode-460:i386 libnvidia-encode-460
libnvidia-encode-460:i386 libnvidia-extra-460 libnvidia-fbc1-460
libnvidia-gl-460 libnvidia-gl-460:i386 libnvidia-ifrl-460 libpciaccess0:i386
libsensors5:i386 libstdc++6:i386 libva-wayland2 libvulkan1:i386
libwayland-client0:i386 libx11-6:i386 libx11-xcb1:i386 libxau6:i386
libxcb-dri2-0:i386 libxcb-dri3-0:i386 libxcb-glx0:i386 libxcb-present0:i386
libxcb-randr0:i386 libxcb-shm0:i386 libxcb-sync1:i386 libxcb-xfixes0:i386
libxcb1:i386 libxdmcp6:i386 libxext6:i386 libxfixes3:i386 libxvctrl0
```

sudo apt-get remove ncompress

A terminal window titled 'rahma@rahma-Lenovo: ~/Desktop' showing the command 'sudo apt-get remove ksh'. The output is identical to the previous screenshot, listing the same set of automatically installed packages that are no longer required.

```
rahma@rahma-Lenovo:~/Desktop$ sudo apt-get remove ksh
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
chromium-codecs-ffmpeg-extra gstreamer1.0-vaapi libatomic1:i386 libbsd0:i386
libdrm-amdgpu1:i386 libdrm-intel1:i386 libdrm-nouveau2:i386
libdrm-radeon1:i386 libdrm2:i386 libedit2:i386 libelf1:i386 libexpat1:i386
libffi7:i386 libglvnd0:i386 libgstreamer-plugins-bad1.0-0 libllvm12:i386
libnvidia-cfg1-460 libnvidia-common-460 libnvidia-compute-460:i386
libnvidia-decode-460 libnvidia-decode-460:i386 libnvidia-encode-460
libnvidia-encode-460:i386 libnvidia-extra-460 libnvidia-fbc1-460
libnvidia-gl-460 libnvidia-gl-460:i386 libnvidia-ifrl-460 libpciaccess0:i386
libsensors5:i386 libstdc++6:i386 libva-wayland2 libvulkan1:i386
libwayland-client0:i386 libx11-6:i386 libx11-xcb1:i386 libxau6:i386
libxcb-dri2-0:i386 libxcb-dri3-0:i386 libxcb-glx0:i386 libxcb-present0:i386
libxcb-randr0:i386 libxcb-shm0:i386 libxcb-sync1:i386 libxcb-xfixes0:i386
libxcb1:i386 libxdmcp6:i386 libxext6:i386 libxfixes3:i386 libxvctrl0
```

sudo apt-get remove ksh

Question 5:

VLC:

```
sudo apt install vlc
```

VsCode:

```
1- sudo apt install software-properties-common  
apt-transport-https wget  
2- wget -q  
https://packages.microsoft.com/keys/microsoft.asc  
-O- | sudo apt-key add -  
3- sudo add-apt-repository "deb [arch=amd64]  
https://packages.microsoft.com/repos/vscode  
stable main"  
4- sudo apt install code
```

Atom:

```
1- sudo apt install software-properties-common  
apt-transport-https wget  
2- wget -q  
https://packagecloud.io/AtomEditor/atom/gpgkey -  
O- | sudo apt-key add -  
3- sudo add-apt-repository "deb [arch=amd64]  
https://packagecloud.io/AtomEditor/atom/any/ any main"  
4- sudo apt install atom
```

Krita

```
1- sudo add-apt-repository ppa:kritalime/ppa  
2- sudo apt install krita
```

Google Chrome

```
1- wget https://dl.google.com/linux/direct/google-  
chrome-stable_current_amd64.deb  
  
2- sudo apt install ./google-chrome-  
stable_current_amd64.deb
```