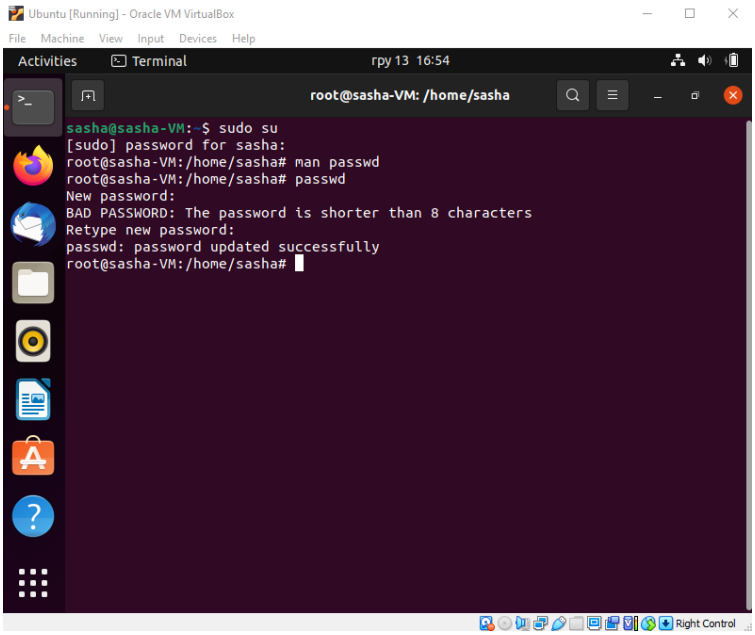
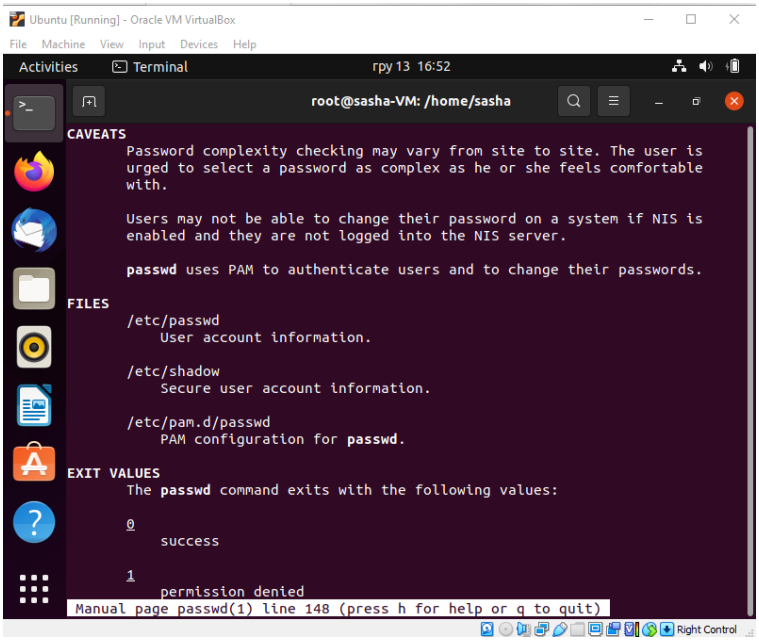
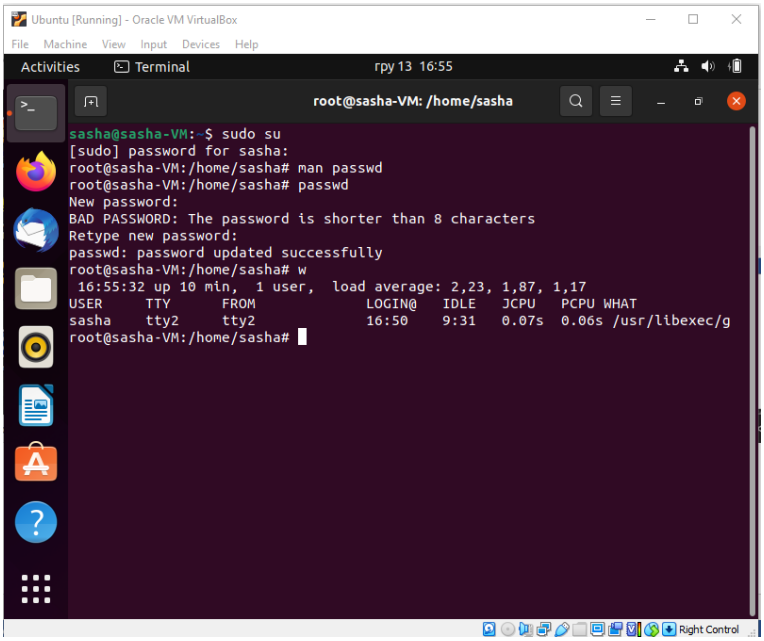
Part 1

1. Sudo su
2. passwd

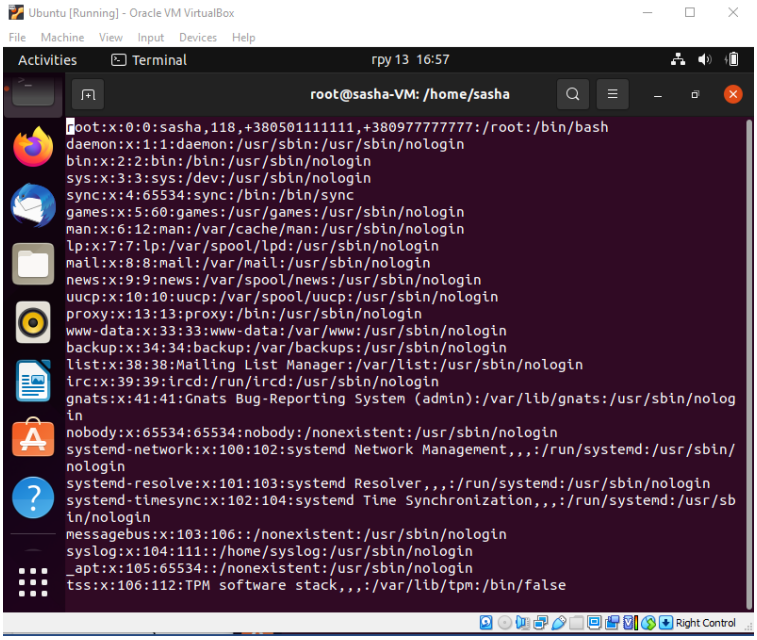


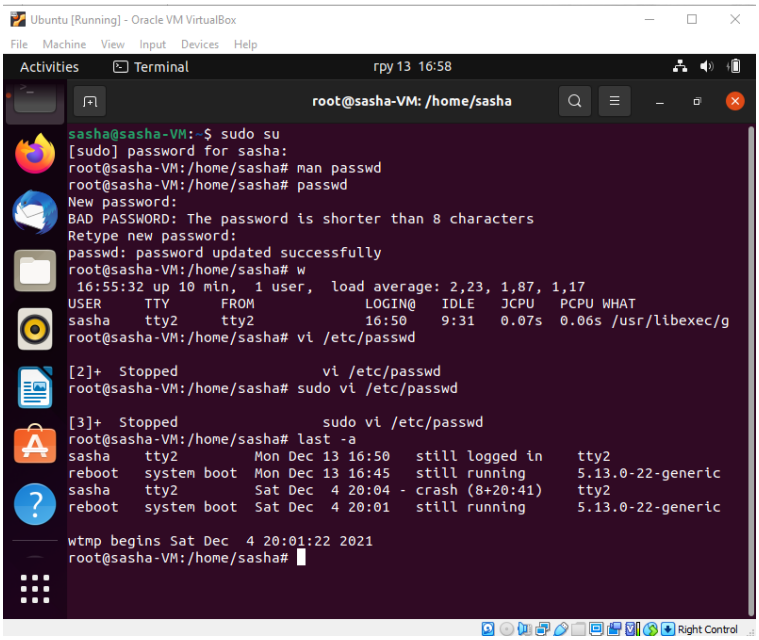


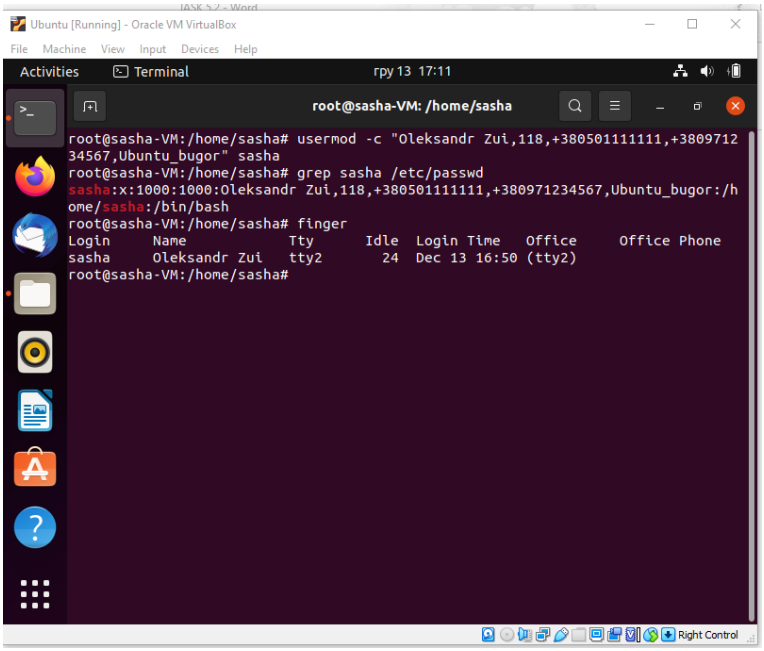
3. w


Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 13 16:55
root@sasha-VM: /home/sasha
sasha@sasha-VM:~$ sudo su
[sudo] password for sasha:
root@sasha-VM:/home/sasha# man passwd
root@sasha-VM:/home/sasha# passwd
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
root@sasha-VM:/home/sasha# w
16:55:32 up 10 min, 1 user, load average: 2,23, 1,87, 1,17
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
sasha tty2 tty2 16:50 9:31 0.07s 0.06s /usr/libexec/g
root@sasha-VM:/home/sasha#
Right Control

4.

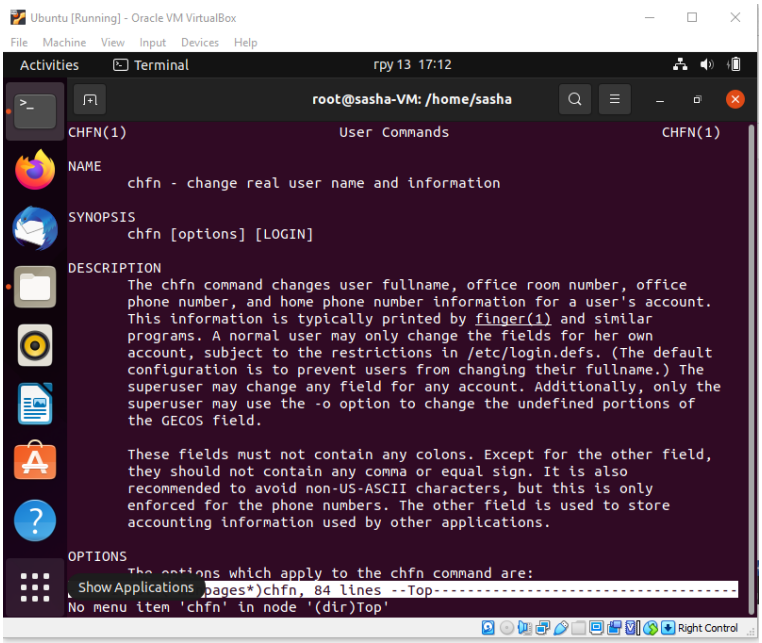

Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 13 16:57
root@sasha-VM: /home/sasha
root:x:0:0:sasha,118,+380501111111,+380977777777:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
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
systemd-timesync:x:102:104:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:103:106::/nonexistent:/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
Right Control


Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 13 16:58
root@sasha-VM: /home/sasha
sasha@sasha-VM:~$ sudo su
[sudo] password for sasha:
root@sasha-VM:/home/sasha# man passwd
root@sasha-VM:/home/sasha# passwd
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
root@sasha-VM:/home/sasha# w
16:55:32 up 10 min, 1 user, load average: 2,23, 1,87, 1,17
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
sasha tty2 tty2 16:50 9:31 0.07s 0.06s /usr/libexec/g
root@sasha-VM:/home/sasha# vi /etc/passwd
[2]+ Stopped vi /etc/passwd
root@sasha-VM:/home/sasha# sudo vi /etc/passwd
[3]+ Stopped sudo vi /etc/passwd
root@sasha-VM:/home/sasha# last -a
sasha tty2 Mon Dec 13 16:50 still logged in tty2
reboot system boot Mon Dec 13 16:45 still running 5.13.0-22-generic
sasha tty2 Sat Dec 4 20:04 - crash (8+20:41) tty2
reboot system boot Sat Dec 4 20:01 still running 5.13.0-22-generic
wtmp begins Sat Dec 4 20:01:22 2021
root@sasha-VM:/home/sasha#
Right Control

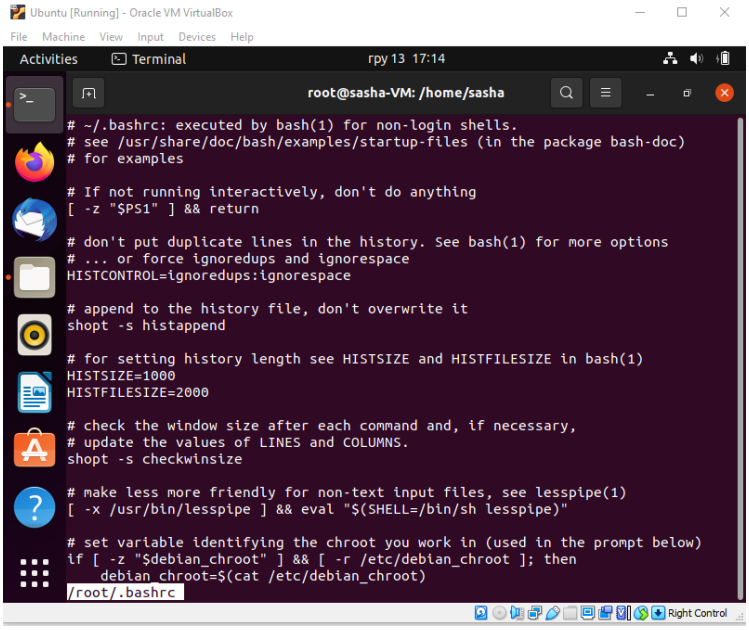

Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 13 17:11
root@sasha-VM: /home/sasha
root@sasha-VM:/home/sasha# usermod -c "Oleksandr Zui,118,+380501111111,+380971234567,Ubuntu_bugor" sasha
root@sasha-VM:/home/sasha# grep sasha /etc/passwd
sasha:x:1000:1000:Oleksandr Zui,118,+380501111111,+380971234567,Ubuntu_bugor:/home/sasha:/bin/bash
root@sasha-VM:/home/sasha# finger
Login Name Tty Idle Login Time Office Office Phone
sasha Oleksandr Zui tty2 24 Dec 13 16:50 (tty2)
root@sasha-VM:/home/sasha#
Right Control

5.

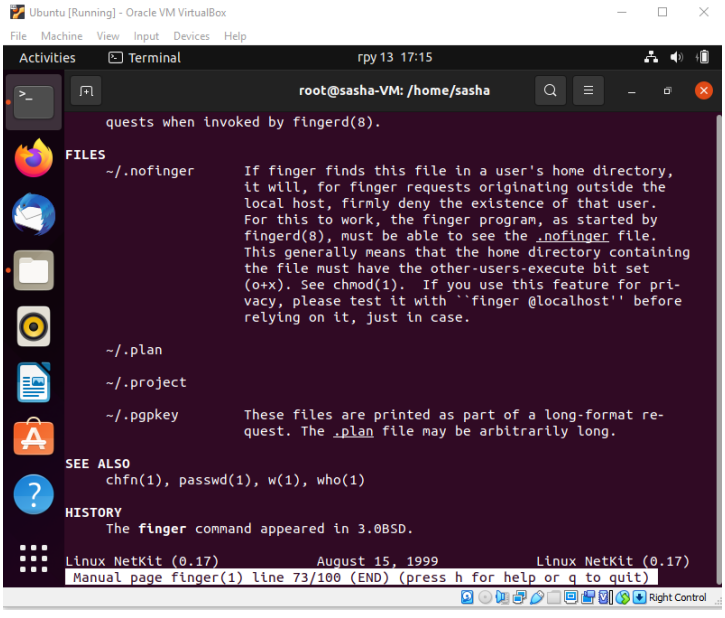

Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 13 17:12
root@sasha-VM: /home/sasha
FINGER(1) BSD General Commands Manual FINGER(1)
NAME
finger – user information lookup program
SYNOPSIS
finger [-lmsp] [user ...] [user@host ...]
DESCRIPTION
The finger displays information about the system users.
Options are:
-s Finger displays the user's login name, real name, terminal name and write status (as a ``*'' after the terminal name if write permission is denied), idle time, login time, office location and office phone number.
Login time is displayed as month, day, hours and minutes, unless more than six months ago, in which case the year is displayed rather than the hours and minutes.
Unknown devices as well as nonexistent idle and login times are displayed as single asterisks.
-l Produces a multi-line format displaying all of the information described for the -s option as well as the user's home directory, home phone number, login shell, mail status, and the contents of
Manual page finger(1) line 1 (press h for help or q to quit)
Right Control


Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 13 17:12
root@sasha-VM: /home/sasha
CHFN(1) User Commands CHFN(1)
NAME
chfn - change real user name and information
SYNOPSIS
chfn [options] [LOGIN]
DESCRIPTION
The chfn command changes user fullname, office room number, office phone number, and home phone number information for a user's account. This information is typically printed by finger(1) and similar programs. A normal user may only change the fields for her own account, subject to the restrictions in /etc/login.defs. (The default configuration is to prevent users from changing their fullname.) The superuser may change any field for any account. Additionally, only the superuser may use the -o option to change the undefined portions of the GECOS field.
These fields must not contain any colons. Except for the other field, they should not contain any comma or equal sign. It is also recommended to avoid non-US-ASCII characters, but this is only enforced for the phone numbers. The other field is used to store accounting information used by other applications.
OPTIONS
The options which apply to the chfn command are:
Show Applications
pages*)chfn, 84 lines --Top----------
No menu item 'chfn' in node '(dir)Top'
Right Control

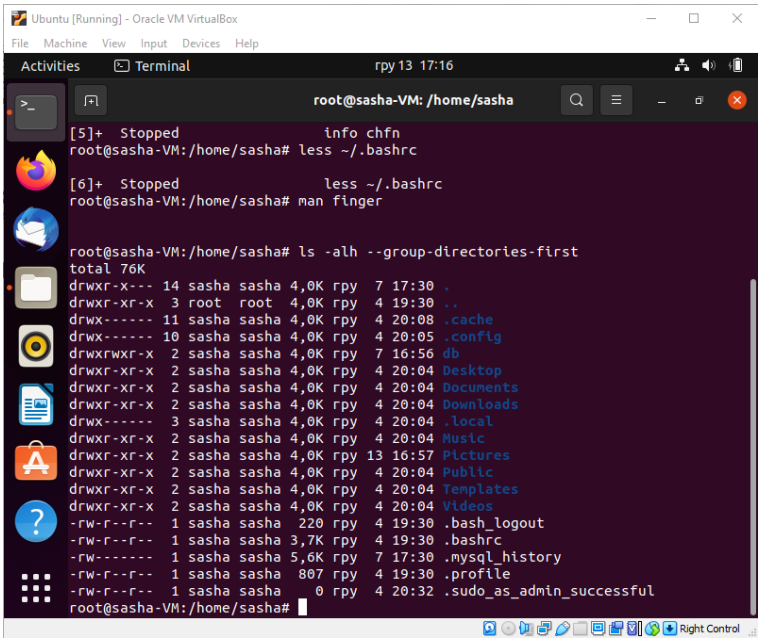
6.


Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 13 17:14
root@sasha-VM: /home/sasha
~/.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
[-z "$PS1"] && return
# don't put duplicate lines in the history. See bash(1) for more options
# ... or force ignoredups and ignorespace
HISTCONTROL=ignoredups:ignorespace
# append to the history file, don't overwrite it
shopt -s histappend
# for setting history length see HISTSIZE and HISTFILESIZE in bash(1)
HISTSIZE=1000
HISTFILESIZE=2000
# check the window size after each command and, if necessary,
# update the values of LINES and COLUMNS.
shopt -s checkwinsize
make less more friendly for non-text input files, see lesspipe(1)
[-x /usr/bin/lesspipe] && eval "$(SHELL=/bin/sh lesspipe)"
# set variable identifying the chroot you work in (used in the prompt below)
if [-z "$debian_chroot"] && [-r /etc/debian_chroot]; then
debian_chroot=$(cat /etc/debian_chroot)
/root/.bashrc
Right Control

7.

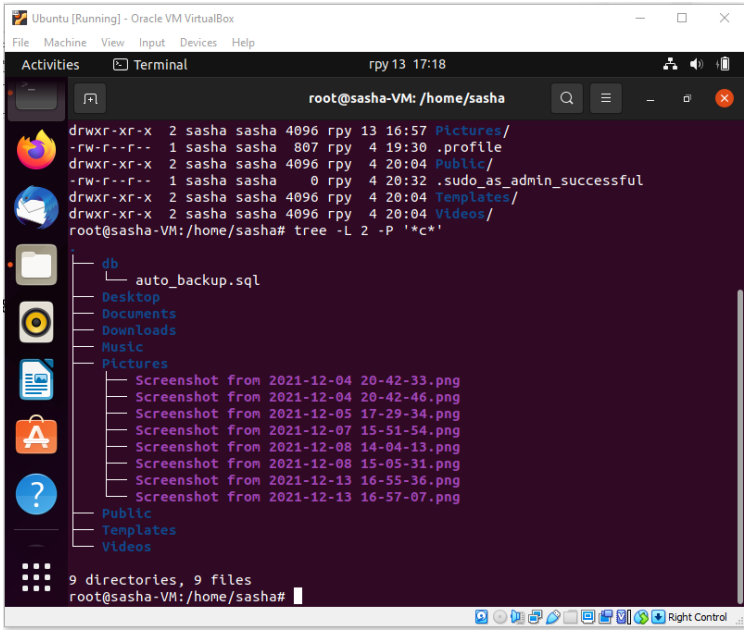

Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 13 17:15
root@sasha-VM: /home/sasha
quests when invoked by fingerd(8).
FILES
~/.nofinger If finger finds this file in a user's home directory, it will, for finger requests originating outside the local host, firmly deny the existence of that user. For this to work, the finger program, as started by fingerd(8), must be able to see the .nofinger file. This generally means that the home directory containing the file must have the other-users-execute bit set (o+x). See chmod(1). If you use this feature for privacy, please test it with ``finger @localhost'' before relying on it, just in case.
~/.plan
~/.project
~/.pgpkey These files are printed as part of a long-format request. The .plan file may be arbitrarily long.
SEE ALSO
chfn(1), passwd(1), w(1), who(1)
HISTORY
The finger command appeared in 3.0BSD.
Linux NetKit (0.17) August 15, 1999 Linux NetKit (0.17)
Manual page finger(1) line 73/100 (END) (press h for help or q to quit)
Right Control

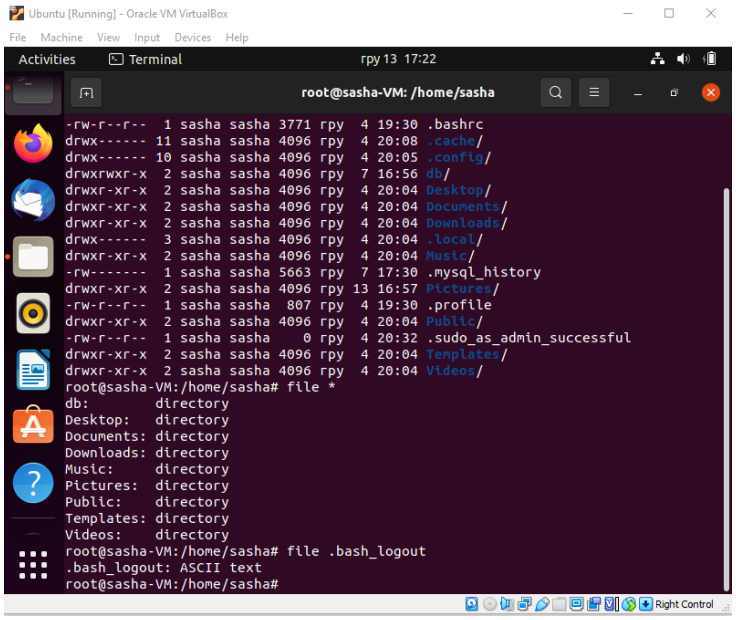
8.


Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 13 17:16
root@sasha-VM: /home/sasha
[5]+ Stopped info chfn
root@sasha-VM:/home/sasha# less ~/.bashrc
[6]+ Stopped less ~/.bashrc
root@sasha-VM:/home/sasha# man finger
root@sasha-VM:/home/sasha# ls -alh --group-directories-first
total 76K
drwxr-x--- 14 sasha sasha 4,0K rpy 7 17:30 .
drwxr-xr-x 3 root root 4,0K rpy 4 19:30 ..
drwx------ 11 sasha sasha 4,0K rpy 4 20:08 .cache
drwx------ 10 sasha sasha 4,0K rpy 4 20:05 .config
drwxrwxr-x 2 sasha sasha 4,0K rpy 7 16:56 db
drwxr-xr-x 2 sasha sasha 4,0K rpy 4 20:04 Desktop
drwxr-xr-x 2 sasha sasha 4,0K rpy 4 20:04 Documents
drwxr-xr-x 2 sasha sasha 4,0K rpy 4 20:04 Downloads
drwx------ 3 sasha sasha 4,0K rpy 4 20:04 .local
drwxr-xr-x 2 sasha sasha 4,0K rpy 4 20:04 Music
drwxr-xr-x 2 sasha sasha 4,0K rpy 13 16:57 Pictures
drwxr-xr-x 2 sasha sasha 4,0K rpy 4 20:04 Public
drwxr-xr-x 2 sasha sasha 4,0K rpy 4 20:04 Templates
drwxr-xr-x 2 sasha sasha 4,0K rpy 4 20:04 Videos
-rw-r--r-- 1 sasha sasha 220 rpy 4 19:30 .bash_logout
-rw-r--r-- 1 sasha sasha 3,7K rpy 4 19:30 .bashrc
-rw------- 1 sasha sasha 5,6K rpy 7 17:30 .mysql_history
-rw-r--r-- 1 sasha sasha 807 rpy 4 19:30 .profile
-rw-r--r-- 1 sasha sasha 0 rpy 4 20:32 .sudo_as_admin_successful
root@sasha-VM:/home/sasha#
Right Control

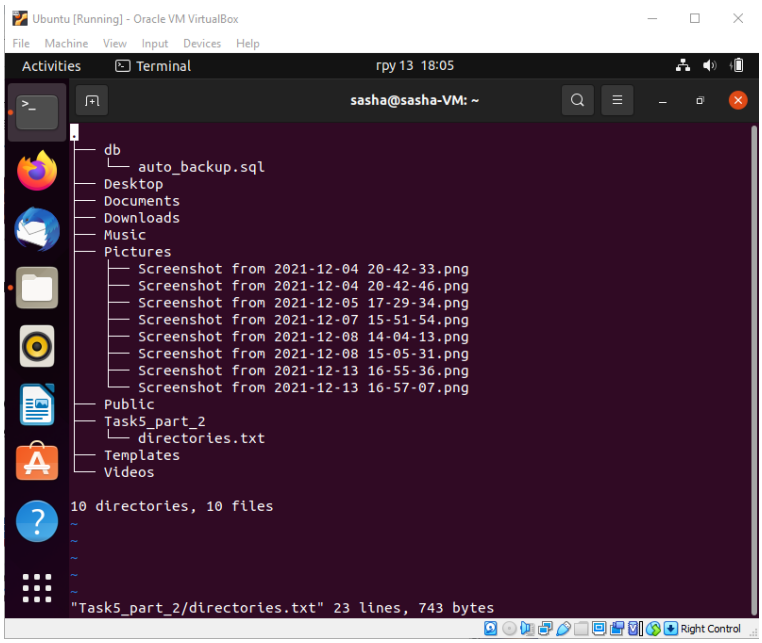
Part 2

1.

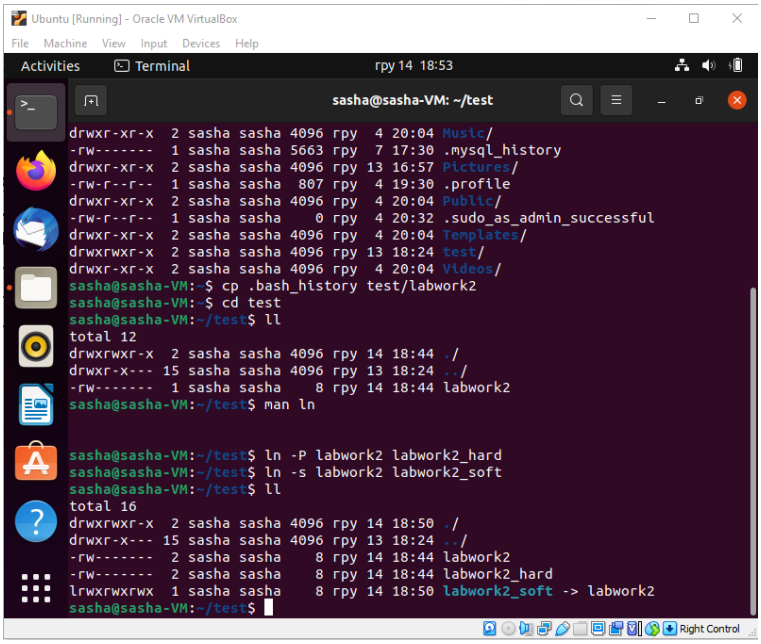

Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 13 17:18
root@sasha-VM: /home/sasha
drwxr-xr-x 2 sasha sasha 4096 rpy 13 16:57 Pictures/
-rw-r--r-- 1 sasha sasha 807 rpy 4 19:30 .profile
drwxr-xr-x 2 sasha sasha 4096 rpy 4 20:04 Public/
-rw-r--r-- 1 sasha sasha 0 rpy 4 20:32 .sudo_as_admin_successful
drwxr-xr-x 2 sasha sasha 4096 rpy 4 20:04 Templates/
drwxr-xr-x 2 sasha sasha 4096 rpy 4 20:04 Videos/
root@sasha-VM:/home/sasha# tree -L 2 -P '*c*'
.
├── db
│ └── auto_backup.sql
├── Desktop
├── Documents
├── Downloads
├── Music
├── Pictures
│ ├── Screenshot from 2021-12-04 20-42-33.png
│ ├── Screenshot from 2021-12-04 20-42-46.png
│ ├── Screenshot from 2021-12-05 17-29-34.png
│ ├── Screenshot from 2021-12-07 15-51-54.png
│ ├── Screenshot from 2021-12-08 14-04-13.png
│ ├── Screenshot from 2021-12-08 15-05-31.png
│ ├── Screenshot from 2021-12-13 16-55-36.png
│ └── Screenshot from 2021-12-13 16-57-07.png
├── Public
├── Templates
└── Videos
9 directories, 9 files
root@sasha-VM:/home/sasha#
Right Control

2. 

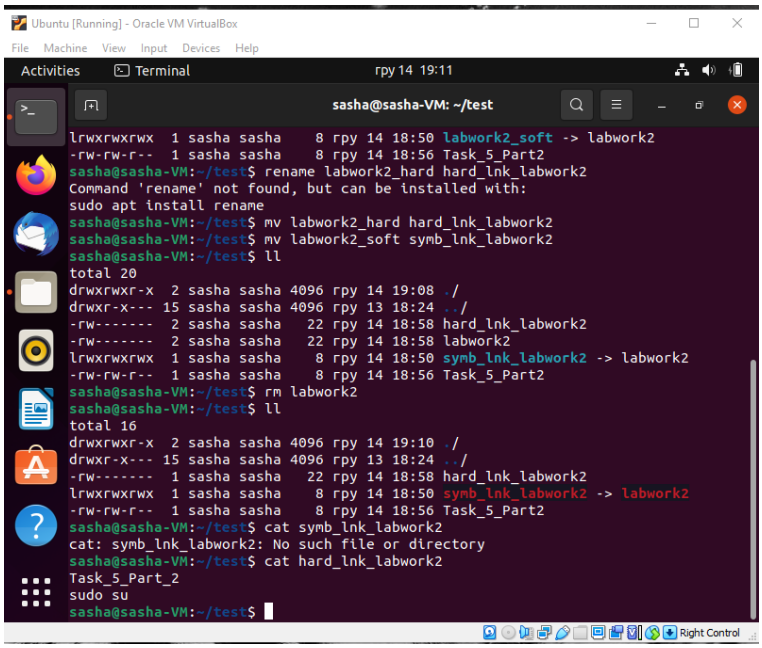
3. Cd – Change to the home directory
   Cd / - Change to the root directory
4. Ls –a –all
   Ls –l – use a long listing format
5. Mkdir Task5_part_2
   Tree > Task5_part_2/directories.txt
   Vi Task5_part_2/directories.txt



   Cp Task5_part_2/directories.txt ~/directories.txt
   Cp Task5_part_2/directories.txt /home/sasha/directories.txt
   Rm –ir Task5_part_2
   Rm –I directories.txt
6. Mkdir test
   Cp .bash_history test/labwork2
   Cd test
   Ln –P labwork2 labwork2_hard
   Ln –s labwork2 labwork2_soft



Nano labwork2_soft
Cat labwork2_soft
Cat labwork2
Mv labwork2_hard hard_lnk_ labwork2
Mv labwork2_soft soft_lnk_ labwork2
Rm labwork2



7. Sudo apt install locate

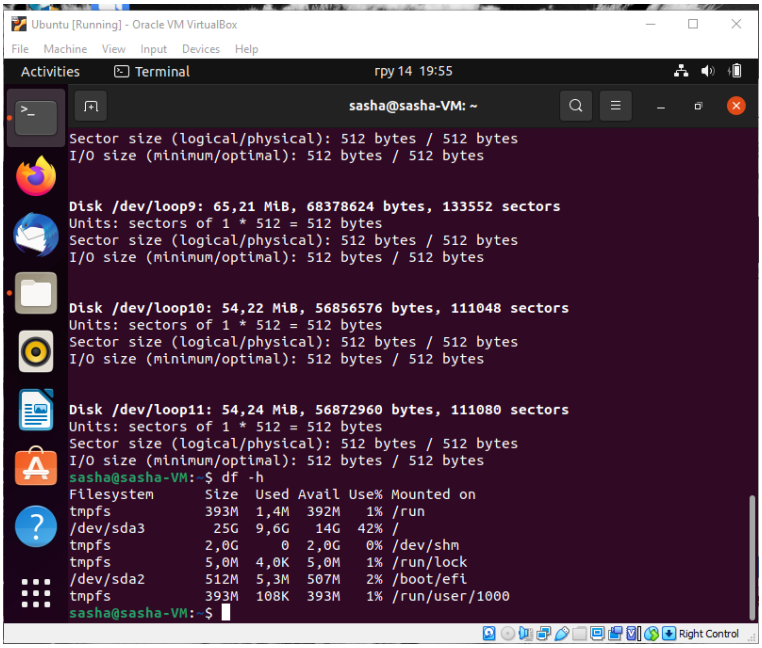
   Sudo updatedb

   Man locate

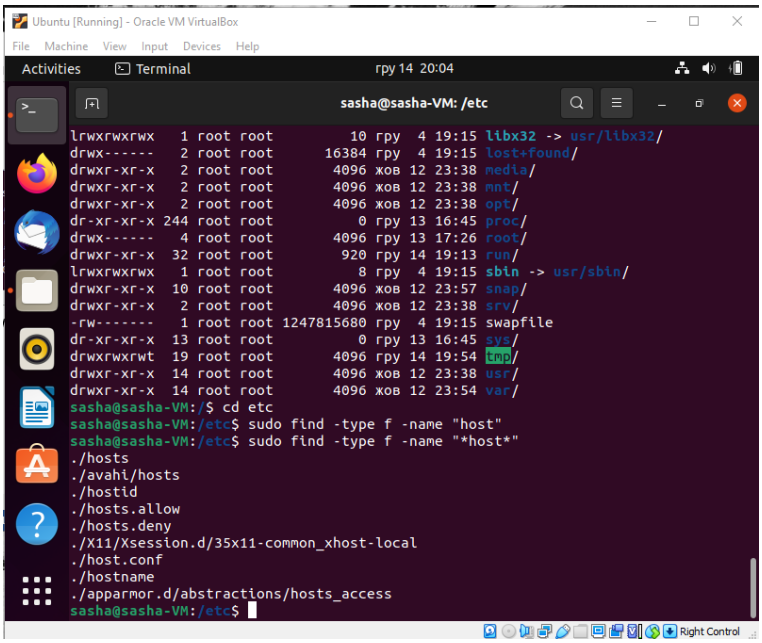
   Locate –A squid

   Locate –A traceroute

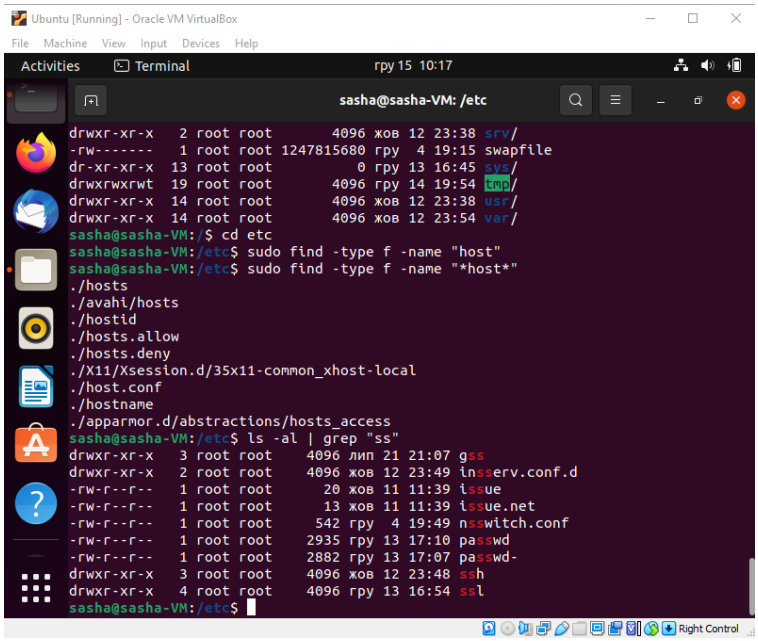
8. Df –h



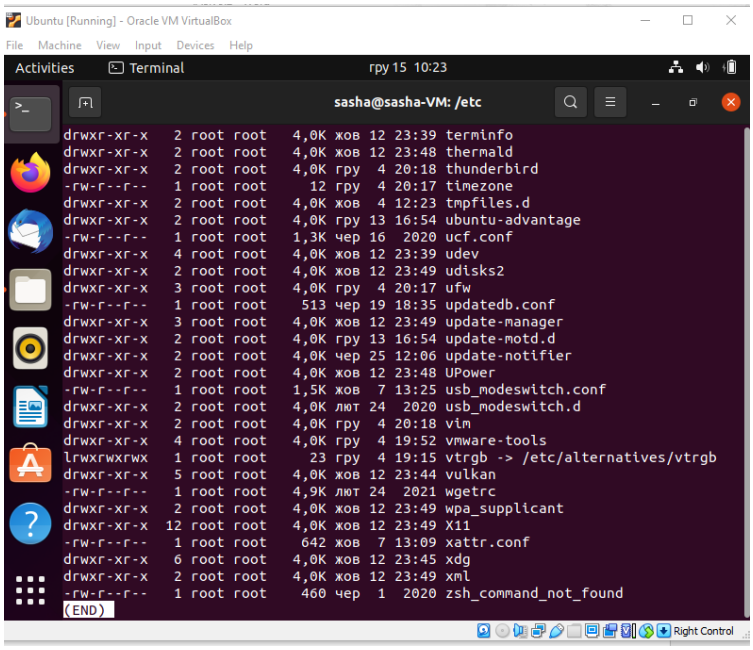
9. Less –N hard_lnk_labwork2 | wc –l
10. Cd /
    Cd etc
    Sudo find –type f –name “*host*”



11. Ls –al | grep “ss”



12. Ls –alh | less



13. Ls –l /dev

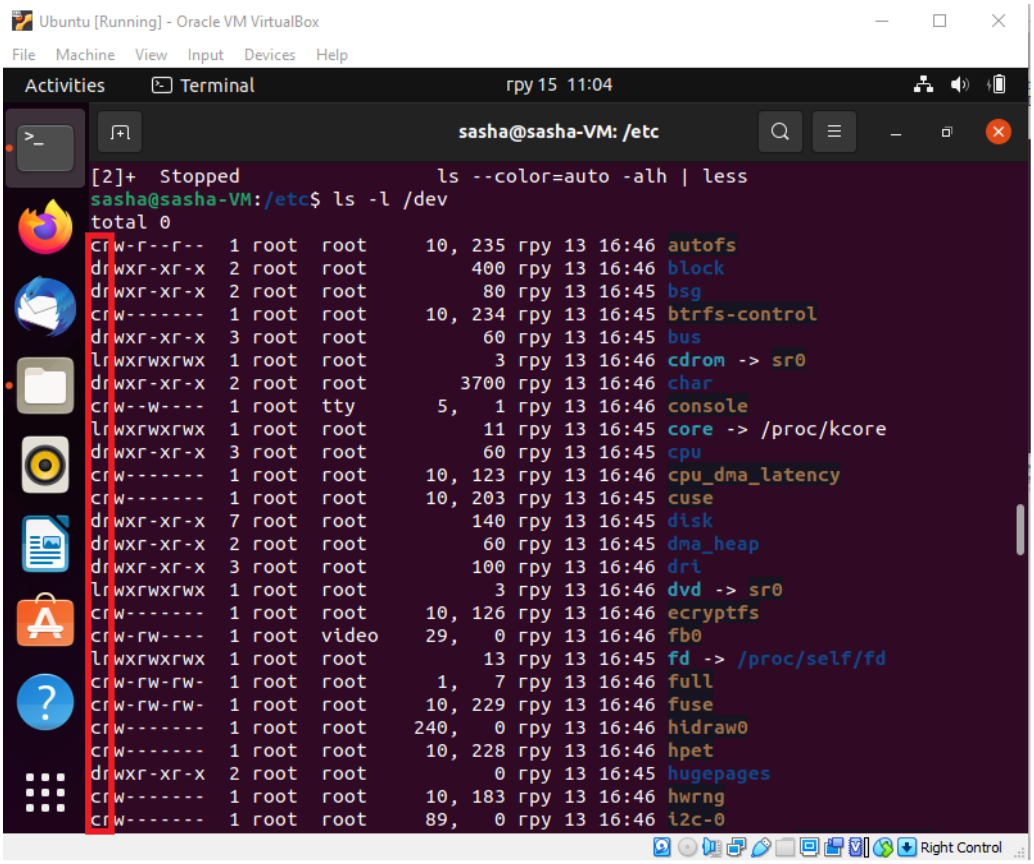
    On screen we see the type of file with the first bit on each line. Device files are denoted as the following:

    c-character

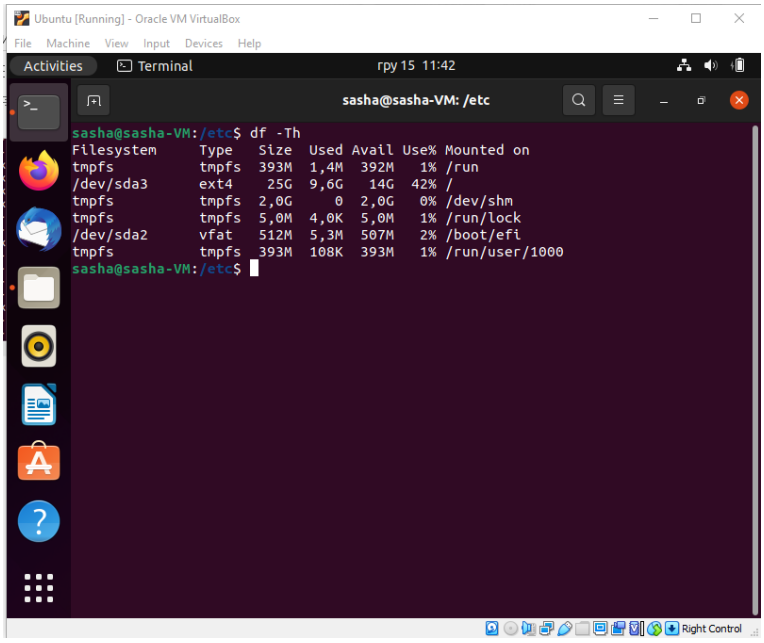
    b-block

    p-pipe

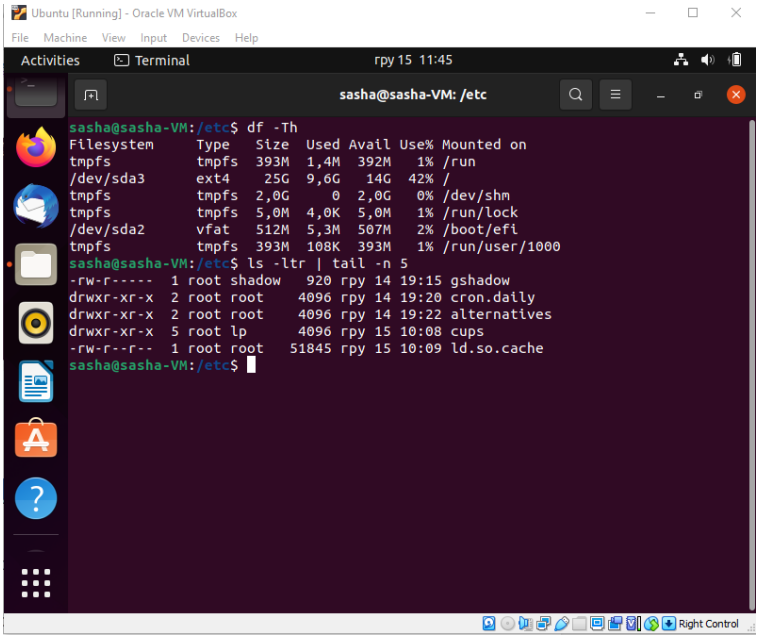
    s-socket



14. Df –Th



15. Ls –ltr | tail –n 5


Ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
rpy 15 11:45
sasha@sasha-VM: /etc
sasha@sasha-VM:/etc$ df -Th
Filesystem Type Size Used Avail Use% Mounted on
tmpfs tmpfs 393M 1,4M 392M 1% /run
/dev/sda3 ext4 25G 9,6G 14G 42% /
tmpfs tmpfs 2,0G 0 2,0G 0% /dev/shm
tmpfs tmpfs 5,0M 4,0K 5,0M 1% /run/lock
/dev/sda2 vfat 512M 5,3M 507M 2% /boot/efi
tmpfs tmpfs 393M 108K 393M 1% /run/user/1000
sasha@sasha-VM:/etc$ ls -ltr | tail -n 5
-rw-r----- 1 root shadow 920 rpy 14 19:15 gshadow
drwxr-xr-x 2 root root 4096 rpy 14 19:20 cron.daily
drwxr-xr-x 2 root root 4096 rpy 14 19:22 alternatives
drwxr-xr-x 5 root lp 4096 rpy 15 10:08 cups
-rw-r--r-- 1 root root 51845 rpy 15 10:09 ld.so.cache
sasha@sasha-VM:/etc$
Right Control