```
stan@stan-VirtualBox:~$ dir
Desktop    Downloads  Music     Public  Templates
Documents  Folder     Pictures  snap    Videos
```

dir

First command is to check the directories in stan(user).

```
stan@stan-VirtualBox:~$ cd Desktop/
```

cd Desktop/

Second command is to change the directory to Desktop/

```
stan@stan-VirtualBox:~/Desktop$ mkdir lab4
```

mkdir lab4

With this command we are creating a directory named lab4/

```
stan@stan-VirtualBox:~/Desktop$ cd lab4/
```

cd lab4/

As I said this is for changing the directories from Desktop/ to lab4/

```
stan@stan-VirtualBox:~/Desktop/lab4$ touch friends.txt
```

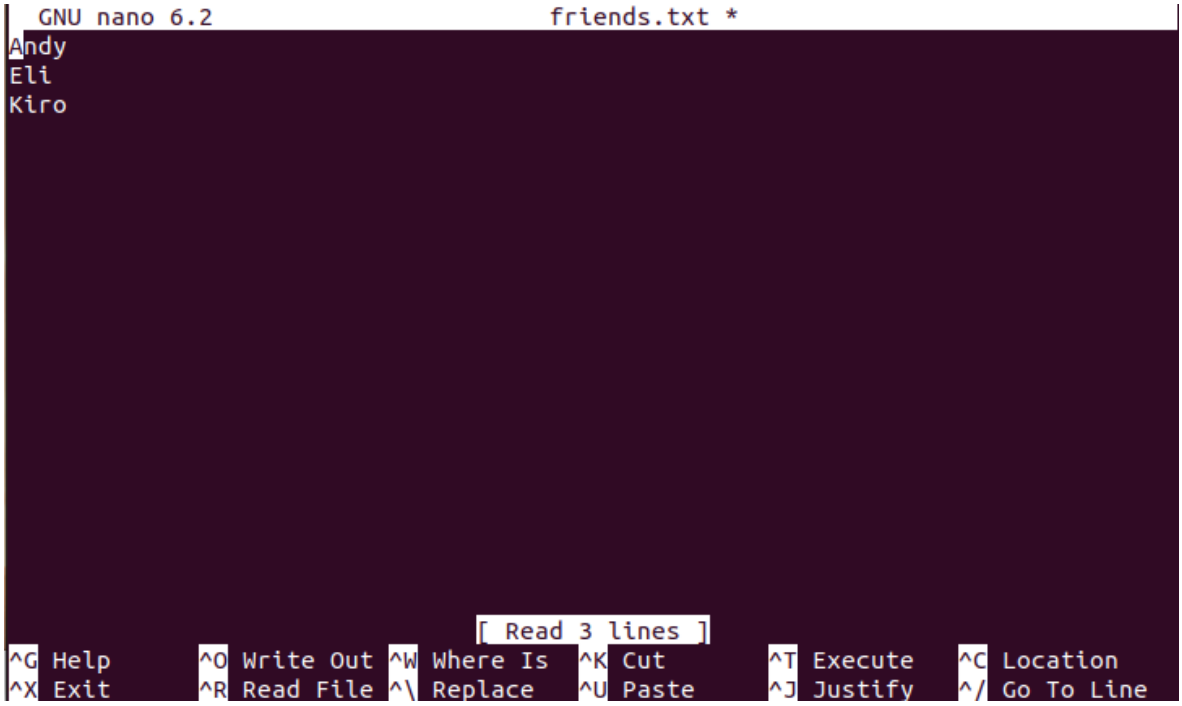
1. touch friend.txt

Here in the current directory we are creating a file, named “friend” with extension .txt

```
stan@stan-VirtualBox:~/Desktop/lab4$ nano friends.txt
```

nano friends.txt

Here with this command we are editing the content of the friends.txt file.
To safe the changes we simply hit ctrl + x + y + enter.



```
stan@stan-VirtualBox:~/Desktop/lab4$ cat friends.txt
Andy
Eli
Kiro
```

2. cat friends.txt

This command is displaying the content of the txt file.

```
stan@stan-VirtualBox:~/Desktop/lab4$ mv friends.txt bestfriends.txt
```

```
stan@stan-VirtualBox:~/Desktop/lab4$ ls
bestfriends.txt
```

3. mv friends.txt bestfriends.txt

This mv command is changing the name of the “friends.txt” file to “bestfriends.txt” file.

```
stan@stan-VirtualBox:~/Desktop/lab4$ cp bestfriends.txt fileCpy.txt
```

```
stan@stan-VirtualBox:~/Desktop/lab4$ ls
bestfriends.txt  fileCpy.txt
```

4. cp bestfriends.txt fileCpy.txt

This command is going to copy “bestfriends.txt” in “fileCpy.txt” in the current directory lab4.

```
stan@stan-VirtualBox:~/Desktop/lab4$ ls -d b*
bestfriends.txt
```

5. ls -d b*

This is listing all elements, starting with the letter “b” in the directory.

```
stan@stan-VirtualBox:~/Desktop/lab4$ wc --bytes fileCpy.txt
14 fileCpy.txt
```

6. wc --bytes fileCpy.txt

This command is telling us how many bytes are taken by the file. In this case the taken bytes are 14.

```
stan@stan-VirtualBox:~/Desktop/lab4$ touch cars.txt
```

7. touch cars.txt

This command, as I mentioned is creating a file. In this example we created “cars.txt”

```
stan@stan-VirtualBox:~/Desktop/lab4$ nano cars.txt
stan@stan-VirtualBox:~/Desktop/lab4$ cat cars.txt
Opel <3
Tesla
Fiat
Honda
Smart
```

nano cars.txt

cat cars.txt

As I mentioned earlier nano is for file editing and cat is for displaying the content of a file quickly. Here we can see 5 Brands(the first is my favorite :)).

```
stan@stan-VirtualBox:~/Desktop/lab4$ wc --bytes cars.txt
31 cars.txt
```

8. wc --bytes cars.txt

As I mentioned this command will display how many bytes are taken by the file. In this example the taken bytes are 31.

```
stan@stan-VirtualBox:~/Desktop/lab4$ cp cars.txt ./tmp/cars.txt
```

9. cp cars.txt ./tmp/cars.txt

This command as I mentioned is going to copy “cars.txt” in directory tmp/ with the name “cars.txt”.

```
stan@stan-VirtualBox:~/Desktop/lab4/tmp$ ls -d *txt
cars.txt
```

10. ls -d *.txt

This command will search in the current directory for a file with extension “.txt”.

```
stan@stan-VirtualBox:~$ mv ./Desktop/lab4/tmp/cars.txt ./Desktop/lab4/tmp/vehicles.txt
stan@stan-VirtualBox:~$ ls -lh ./Desktop/lab4/tmp
total 4,0K
-rw-rw-r-- 1 stan stan 31 мар  1 23:05 vehicles.txt
```

11. mv ./Desktop/lab4/tmp/cars.txt ./Desktop/lab4/tmp/vehicles.txt

This is changing the name of “cars.txt” to “vahicles.txt”.

```
-rw-r--r--   1 root root     592 янв 24  2022 logrotate.conf
drwxr-xr-x   2 root root    4096 фев 28 00:15 logrotate.d/
-rw-r--r--   1 root root     104 фев 16 18:02 lsb-release
-r--r--r--   1 root root      33 фев 28 00:16 machine-id
-rw-r--r--   1 root root     111 мар 24  2022 magic
-rw-r--r--   1 root root     111 мар 24  2022 magic.mime
-rw-r--r--   1 root root   36240 фев 28 00:15 mailcap
-rw-r--r--   1 root root     449 дек 11  2021 mailcap.order
-rw-r--r--   1 root root    5217 мар 17  2022 manpath.config
-rw-r--r--   1 root root   72029 мар 21  2022 mime.types
-rw-r--r--   1 root root     744 янв  8  2022 mke2fs.conf
drwxr-xr-x   3 root root    4096 фев 23 05:58 ModemManager/
drwxr-xr-x   2 root root    4096 фев 28 22:45 modprobe.d/
-rw-r--r--   1 root root     195 фев 23 05:57 modules
drwxr-xr-x   2 root root    4096 фев 23 05:59 modules-load.d/
lrwxrwxrwx   1 root root      19 фев 28 00:14 mtab -> ../proc/self/mounts
-rw-r--r--   1 root root   11204 фев  9  2022 nanorc
-rw-r--r--   1 root root     767 мар 24  2022 netconfig
drwxr-xr-x   2 root root    4096 фев 23 06:03 netplan/
drwxr-xr-x   6 root root    4096 фев 23 05:59 network/
drwxr-xr-x   8 root root    4096 фев 23 05:57 networkd-dispatcher/
drwxr-xr-x   7 root root    4096 фев 23 05:59 NetworkManager/
-rw-r--r--   1 root root      91 окт 15  2021 networks
drwxr-xr-x   2 root root    4096 фев 23 05:57 newt/
-rwxr-xr-x   1 root root     228 мар 23  2022 nftables.conf*
-rw-r--r--   1 root root     542 фев 28 00:15 nsswitch.conf
drwxr-xr-x   4 root root    4096 фев 23 05:59 openvpn/
drwxr-xr-x   2 root root    4096 фев 23 05:57 opt/
lrwxrwxrwx   1 root root      21 фев 28 00:12 os-release -> ../usr/lib/os-release
drwxr-xr-x   2 root root    4096 фев 23 05:59 PackageKit/
-rw-r--r--   1 root root     552 авг 12  2020 pam.conf
drwxr-xr-x   2 root root    4096 фев 28 00:15 pam.d/
-rw-rw-r--   1 root root       3 фев 28 00:14 papersize
-rw-r--r--   1 root root    2884 фев 28 00:14 passwd
-rw-r--r--   1 root root    2877 фев 28 00:14 passwd-
drwxr-xr-x   2 root root    4096 фев 23 05:59 pcmcia/
drwxr-xr-x   3 root root    4096 фев 23 05:58 perl/
drwxr-xr-x   4 root root    4096 фев 23 05:58 pki/
drwxr-xr-x   3 root root    4096 фев 23 05:58 pm/
-rw-r--r--   1 root root    7649 фев 23 05:59 pnm2ppa.conf
drwxr-xr-x   4 root root    4096 фев 23 05:58 polkit-1/
drwxr-xr-x   8 root dip     4096 фев 23 05:59 ppp/
-rw-r--r--   1 root root     582 окт 15  2021 profile
drwxr-xr-x   2 root root    4096 фев 23 05:59 profile.d/
-rw-r--r--   1 root root    2932 апр  2  2013 protocols
drwxr-xr-x   4 root root    4096 фев 23 06:00 pulse/
-rw-------   1 root root       0 фев 23 05:57 .pwd.lock
drwxr-xr-x   2 root root    4096 фев 23 05:57 python3/
drwxr-xr-x   2 root root    4096 фев 23 05:57 python3.10/
drwxr-xr-x   2 root root    4096 фев 28 00:15 rc0.d/
```

```
  GNU nano 6.2                                                                pa
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
systemd-oom:x:108:116:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:117::/nonexistent:/usr/sbin/nologin
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/usr/sbin/nologin
usbmux:x:111:46:usbmux daemon,,,:/var/lib/usbmux:/usr/sbin/nologin
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
kernoops:x:113:65534:Kernel Oops Tracking Daemon,,,:/:/usr/sbin/nologin
avahi:x:114:121:Avahi mDNS daemon,,,:/run/avahi-daemon:/usr/sbin/nologin
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
rtkit:x:116:123:RealtimeKit,,,:/proc:/usr/sbin/nologin
whoopsie:x:117:124::/nonexistent:/bin/false
sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
speech-dispatcher:x:119:29:Speech Dispatcher,,,:/run/speech-dispatcher:/bin/false
fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
nm-openvpn:x:121:127:NetworkManager OpenVPN,,,:/var/lib/openvpn/chroot:/usr/sbin/nologin
saned:x:122:129::/var/lib/saned:/usr/sbin/nologin
colord:x:123:130:colord colour management daemon,,,:/var/lib/colord:/usr/sbin/nologin
geoclue:x:124:131::/var/lib/geoclue:/usr/sbin/nologin
pulse:x:125:132:PulseAudio daemon,,,:/run/pulse:/usr/sbin/nologin
gnome-initial-setup:x:126:65534::/run/gnome-initial-setup/:/bin/false
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
gdm:x:128:134:Gnome Display Manager:/var/lib/gdm3:/bin/false
stan:x:1000:1000:Stan,,,:/home/stan:/bin/bash
```

12. cd ..
cd etc
nano passwd

With this we are navigating to root, from there to directory etc/ and from there to passwd file, and to see the content we are editing the file with nano.