

# Lab#2

```
student:x:111:  
vahi-autoipd:x:112:  
luetooth:x:113:  
tkit:x:114:  
sh:x:115:  
padmin:x:116:student  
hoopsie:x:117:  
canner:x:118:saned  
aned:x:119:  
ulse:x:120:  
ulse-access:x:121:  
vahi:x:122:  
olord:x:123:  
eoclue:x:124:  
dm:x:125:  
tudent:x:1000:  
ambashare:x:126:student  
boxusers:x:127:  
systemd-timesync:x:128:  
vm:x:129:  
m-openvpn:x:130:  
systemd-coredump:x:999:  
ender:x:131:  
ndump:x:132:
```

```
student@linux:~$ sudo useradd Muzamil  
[sudo] password for student:
```

```
input:x:104:  
crontab:x:105:  
syslog:x:106:  
messagebus:x:107:  
netdev:x:108:  
mlocate:x:109:  
ssl-cert:x:110:  
uidd:x:111:  
avahi-autoipd:x:112:  
bluetooth:x:113:  
rtkit:x:114:  
ssh:x:115:  
lpadmin:x:116:student  
whoopsie:x:117:  
scanner:x:118:saned  
saned:x:119:  
pulse:x:120:  
pulse-access:x:121:  
avahi:x:122:  
colord:x:123:  
geoclue:x:124:  
gdm:x:125:  
student:x:1000:  
smbshare:x:126:student  
vboxusers:x:127:  
systemd-timesync:x:128:  
kvm:x:129:  
nm-openvpn:x:130:  
systemd-coredump:x:999:  
render:x:131:  
tcpdump:x:132:  
docker:x:998:  
sectionj:x:1002:  
ammar:x:1001:  
Muzamil:x:1003:
```

```
student@linux:~$ sudo addgroup oslab2
Adding group `oslab2' (GID 1004) ...
Done.
```

```
student@linux:~$ usermod -a oslab2 Muzamil
Usage: usermod [options] LOGIN

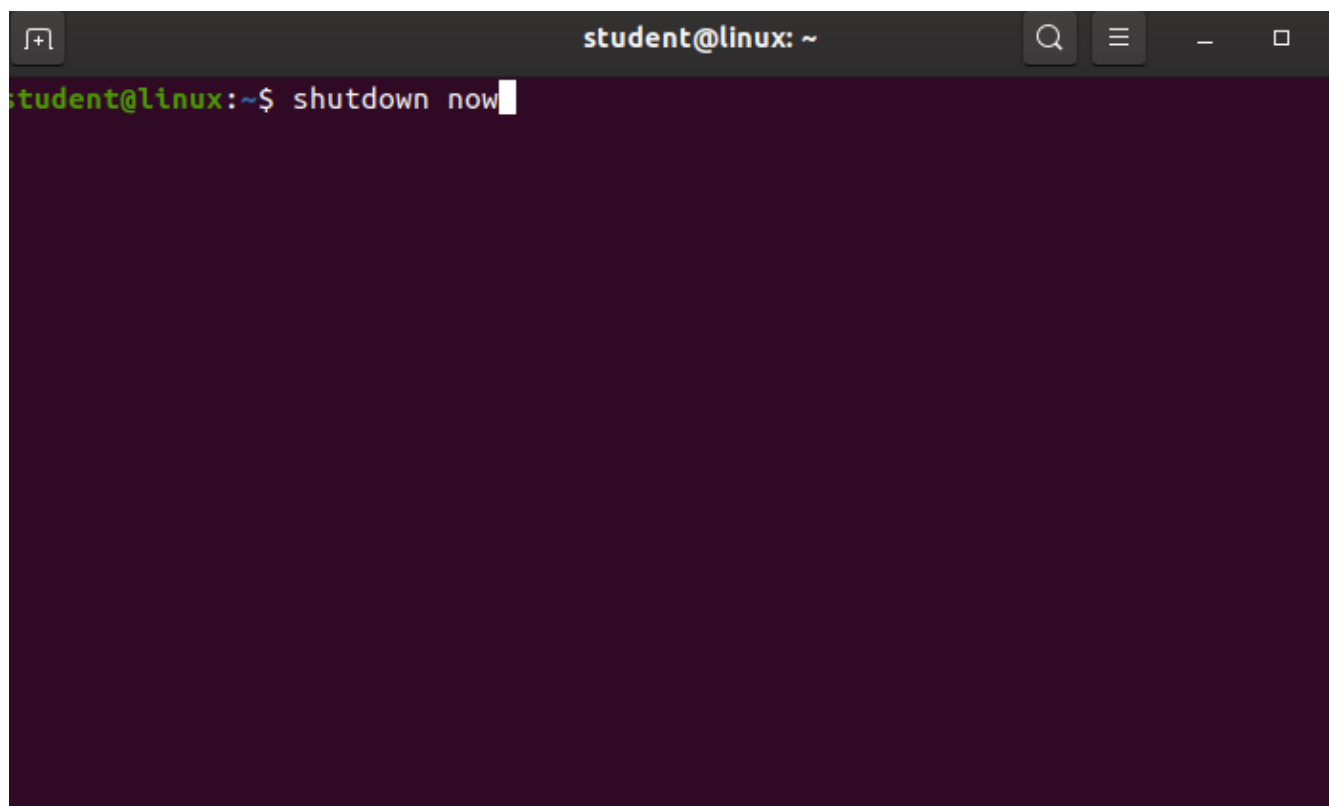
Options:
  -c, --comment COMMENT      new value of the GECOS field
  -d, --home HOME_DIR        new home directory for the user account
  -e, --expiredate EXPIRE_DATE
                              set account expiration date to EXPIRE_DATE
  -f, --inactive INACTIVE    set password inactive after expiration
                              to INACTIVE
  -g, --gid GROUP             force use GROUP as new primary group
  -G, --groups GROUPS         new list of supplementary GROUPS
  -a, --append                append the user to the supplemental GROUPS
                              mentioned by the -G option without removing
                              him/her from other groups
  -h, --help                  display this help message and exit
  -l, --login NEW_LOGIN       new value of the login name
  -L, --lock                  lock the user account
  -m, --move-home             move contents of the home directory to the
                              new location (use only with -d)
  -o, --non-unique            allow using duplicate (non-unique) UID
  -p, --password PASSWORD     use encrypted password for the new password
  -R, --root CHROOT_DIR       directory to chroot into
  -s, --shell SHELL           new login shell for the user account
  -u, --uid UID               new UID for the user account
  -U, --unlock                unlock the user account
  -v, --add-subuids FIRST-LAST
                              add range of subordinate uids
  -V, --del-subuids FIRST-LAST
                              remove range of subordinate uids
  -w, --add-subgids FIRST-LAST
                              add range of subordinate gids
  -W, --del-subgids FIRST-LAST
                              remove range of subordinate gids
  -Z, --selinux-user SEUSER   new SELinux user mapping for the user account
```

```
student@linux:~$ usermod -a -G oslab2 Muzamil
usermod: Permission denied.
usermod: cannot lock /etc/passwd; try again later.
student@linux:~$ sudo usermod -a -G oslab2 Muzamil
student@linux:~$ getent group oslab2
oslab2:x:1004:Muzamil
```

```
student@linux:~$ usermod -a -G oslab2 Muzamil
usermod: Permission denied.
usermod: cannot lock /etc/passwd; try again later.
student@linux:~$ sudo usermod -a -G oslab2 Muzamil
student@linux:~$ getent group oslab2
oslab2::Files:Muzamil
```

```
student@linux:~$ sudo adduser zamil
Adding user `zamil' ...
Adding new group `zamil' (1005) ...
Adding new user `zamil' (1003) with group `zamil' ...
Creating home directory `/home/zamil' ...
Copying files from `/etc/skel' ...
New password:
Retype new password:
Sorry, passwords do not match.
passwd: Authentication token manipulation error
passwd: password unchanged
Try again? [y/N] N
Changing the user information for zamil
Enter the new value, or press ENTER for the default
    Full Name []: Muzamil
    Room Number []: 3
    Work Phone []: 2
    Home Phone []: 2
    Other []: 2
3Is the information correct? [Y/n] y
```

```
student@linux:~$ passwd
Changing password for student.
Current password:
New password:
Retype new password:
Bad: new password is too simple
New password:
Retype new password:
passwd: password updated successfully
student@linux:~$
```

A terminal window with a dark background. The title bar at the top shows 'student@linux: ~' and standard window controls (search, menu, zoom, close). The terminal text shows a green prompt 'student@linux:~\$' followed by the command 'shutdown now' and a white cursor at the end.

```
student@linux:~$ shutdown now
```

```
student@linux: ~  
student@linux:~$ init 0
```

```
student@linux: ~  
student@linux:~$ init 6
```

```
student@linux:~$ sudo reboot
```

```
student@linux:~$ cd Desktop
student@linux:~/Desktop$ touch lab2.c
student@linux:~/Desktop$ ls
lab1  lab1.c  lab2  lab2.c  lab3.c
student@linux:~/Desktop$
```



lab2.c





```
student@linux:~/Desktop$ touch -t 130207111630 BigBattle
student@linux:~/Desktop$ LS
LS: command not found
student@linux:~/Desktop$ ls
130207111630  BigBattle  lab1.c  lab2.c  lab3.c  -t
student@linux:~/Desktop$
```

lab3.c



130207111630



BigBattle



130207111630

```
student@linux:~/Desktop$ ls -l
total 12
-rw-r--r-- 1 student student 0 Feb 11 15:14 130207111630
-rw-r--r-- 1 student student 0 Feb 11 15:14 BigBattle
-rw-r--r-- 1 student student 55 Feb 11 14:11 lab1.c
-rw-r--r-- 1 student student 56 Feb 11 15:11 lab2.c
-rw-r--r-- 1 student student 50 Feb  4 16:01 lab3.c
-rw-r--r-- 1 student student 0 Feb 11 15:14 -t
```

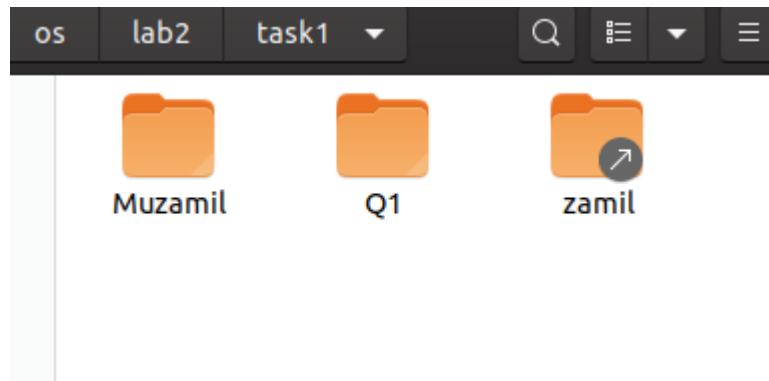
```
student@linux:~/Desktop$ pwd
/home/student/Desktop
```

```
student@linux:~/Desktop$ file BigBattle
BigBattle: empty
```

```

student@linux:~/Desktop$ mkdir os
student@linux:~/Desktop$ cd os
student@linux:~/Desktop/os$ mkdir -p lab2/task1/Q1
student@linux:~/Desktop/os$ cd lab2
student@linux:~/Desktop/os/lab2$ cd task1
student@linux:~/Desktop/os/lab2/task1$ mkdir Muzamil
student@linux:~/Desktop/os/lab2/task1$ cd Muzamil
student@linux:~/Desktop/os/lab2/task1/Muzamil$ touch oslab2.txt
student@linux:~/Desktop/os/lab2/task1/Muzamil$ cd ..
student@linux:~/Desktop/os/lab2/task1$ ln -s Muzamil zamil
student@linux:~/Desktop/os/lab2/task1$

```



```

student@linux:~/Desktop/os/lab2/task1/Muzamil$ touch oslab2.txt
student@linux:~/Desktop/os/lab2/task1/Muzamil$ cd ..
student@linux:~/Desktop/os/lab2/task1$ ln -s Muzamil zamil
student@linux:~/Desktop/os/lab2/task1$ touch zamil.txt
student@linux:~/Desktop/os/lab2/task1$ ln -s zamil copy
student@linux:~/Desktop/os/lab2/task1$ ln -l
ln: invalid option -- 'l'
Try 'ln --help' for more information.
student@linux:~/Desktop/os/lab2/task1$ ls -l
total 12
lrwxrwxrwx 1 student student 5 Feb 11 15:42 copy -> zamil
drwxr-xr-x 2 student student 4096 Feb 11 15:34 Muzamil
drwxr-xr-x 2 student student 4096 Feb 11 15:31 Q1
lrwxrwxrwx 1 student student 7 Feb 11 15:36 zamil -> Muzamil
-rw-r--r-- 1 student student 1117 Feb 11 15:40 zamil.txt
student@linux:~/Desktop/os/lab2/task1$

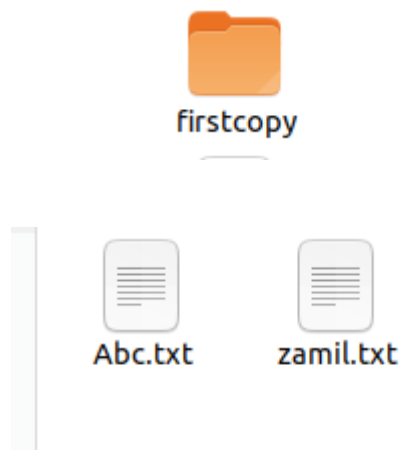
```



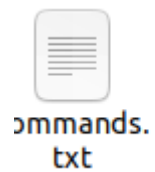
```
student@linux:~/Desktop/os/lab2/task1$ cat zamil.txt
operating system (OS), program that manages a computer's resources, especially the allocation of those resources among other programs. Typical resources include the central processing unit (CPU), computer memory, file storage, input/output (I/O) devices, and network connections.operating system (OS), program that manages a computer's resources, especially the allocation of those resources among other programs. Typical resources include the central processing unit (CPU), computer memory, file storage, input/output (I/O) devices, and network connections.operating system (OS), program that manages a computer's resources, especially the allocation of those resources among other programs. Typical resources include the central processing unit (CPU), computer memory, file storage, input/output (I/O) devices, and network connections.operating system (OS), program that manages a computer's resources, especially the allocation of those resources among other programs. Typical resources include the central processing unit (CPU), computer memory, file storage, input/output (I/O) devices, and network connections.
```

```
student@linux:~/Desktop/os/lab2/task1$ head -1 zamil.txt
operating system (OS), program that manages a computer's resources, especially the allocation of tho
```

```
student@linux:~/Desktop/os/lab2/task1$ cp zamil.txt Abc.txt
student@linux:~/Desktop/os/lab2/task1$ cp -r Muzamil firstcopy
student@linux:~/Desktop/os/lab2/task1$
```



```
student@linux:~/Desktop/os/lab2/task1$ mv zamil.txt commands.txt
student@linux:~/Desktop/os/lab2/task1$
```



```
student@linux:~/Desktop/os/lab2/task1$ rm -r Q1
student@linux:~/Desktop/os/lab2/task1$
```

```
student@linux:~$ cal
      February 2022
Su Mo Tu We Th Fr Sa
                1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28

student@linux:~$ whatis
whatis what?
student@linux:~$ whereis
whereis: not enough arguments
Try 'whereis --help' for more information.
student@linux:~$ cd Desktop
student@linux:~/Desktop$ whereis
whereis: not enough arguments
Try 'whereis --help' for more information.
student@linux:~/Desktop$ cd os
student@linux:~/Desktop/os$ cd lab2
student@linux:~/Desktop/os/lab2$ cd task1
student@linux:~/Desktop/os/lab2/task1$
```

```
student@linux:~/Desktop/os/lab2$ cd task1
student@linux:~/Desktop/os/lab2/task1$ whereis ls
ls: /bin/ls /usr/share/man/man1/ls.1.gz
student@linux:~/Desktop/os/lab2/task1$ whatis ls
ls (1)          - list directory contents
student@linux:~/Desktop/os/lab2/task1$
```

```
student@linux:~/Desktop/os/lab2/task1$ ifconfig
```

Command 'ifconfig' not found, but can be installed with:

```
sudo apt install net-tools
```

```
student@linux:~/Desktop/os/lab2/task1$ sudo apt install net-tools
```

```
[sudo] password for student:
```

```
Reading package lists... Done
```

```
Building dependency tree
```

```
Reading state information... Done
```

The following packages were automatically installed and are no longer required:

```
adium-theme-ubuntu command-not-found-data diffstat example-content fwupdate  
g++-7 g++-8 gettext gir1.2-gtksource-3.0 gir1.2-mutter-2 gir1.2-mutter-4  
gnome-user-guide guile-2.0-libs ifupdown intltool-debian iputils-arping  
libapt-inst2.0 libapt-pkg-perl libapt-pkg5.0 libarchive-zip-perl libargon2-0  
libart-2.0-2 libasync-mergepoint-perl libavcodec57 libavfilter6  
libavformat57 libavresample3 libavutil55 libb-hooks-op-check-perl  
libbind9-160 libboost-date-time1.65.1 libboost-filesystem1.65.1  
libboost-iostreams1.65.1 libboost-locale1.65.1 libboost-system1.65.1
```

```
student@linux:~/Desktop/os/lab2/task1$ ps
```

| PID  | TTY   | TIME     | CMD  |
|------|-------|----------|------|
| 5501 | pts/0 | 00:00:00 | bash |
| 8470 | pts/0 | 00:00:00 | ps   |

```
student@linux:~/Desktop/os/lab2/task1$ ps -A
```

| PID | TTY | TIME     | CMD                  |
|-----|-----|----------|----------------------|
| 1   | ?   | 00:00:05 | systemd              |
| 2   | ?   | 00:00:00 | kthreadd             |
| 3   | ?   | 00:00:00 | rcu_gp               |
| 4   | ?   | 00:00:00 | rcu_par_gp           |
| 6   | ?   | 00:00:00 | kworker/0:0H-kblockd |
| 9   | ?   | 00:00:00 | mm_percpu_wq         |
| 10  | ?   | 00:00:00 | ksoftirqd/0          |
| 11  | ?   | 00:00:01 | rcu_sched            |
| 12  | ?   | 00:00:00 | migration/0          |
| 13  | ?   | 00:00:00 | idle_inject/0        |
| 14  | ?   | 00:00:00 | cpuhp/0              |
| 15  | ?   | 00:00:00 | cpuhp/1              |
| 16  | ?   | 00:00:00 | idle_inject/1        |
| 17  | ?   | 00:00:00 | migration/1          |

```
student@linux:~/Desktop/os/lab2/task1$ kill 2675
student@linux:~/Desktop/os/lab2/task1$
```

```
student@linux:~/Desktop/os/lab2/task1$ grep *.txt
```

operating system (OS), program that manages a computer's resources, especially the allocation of those resources among other programs. Typical resources include the central process

se resources among other programs. Typical resources include the central process

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