## cat /etc/passwd

## sudo useradd user1 -g 1001

```
rtkit:x:172:172:RealtimeKit:/proc:/sbin/nologin
sssd:x:995:991:User for sssd:/:/sbin/nologin
libstoragemgmt:x:994:990:daemon account for libstoragemgmt:/var/run/lsm:/sbin/nologin
setroubleshoot:x:993:989:SELinux troubleshoot server:/var/lib/setroubleshoot:/sb
in/nologin
pipewire:x:992:987:PipeWire System Daemon:/var/run/pipewire:/sbin/nologin
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin
geoclue:x:991:986:User for geoclue:/var/lib/geoclue:/sbin/nologin
flatpak:x:999:985:User for flatpak system helper:/:/sbin/nologin
gdm:x:42:42::/var/lib/gdm:/sbin/nologin
cockpit-ws:x:989:984:User for cockpit web service:/nonexisting:/sbin/nologin
cockpit-ws:x:989:984:User for cockpit web service:/nonexisting:/sbin/nologin
gnome-initial-setup:x:987:982::/run/gnome-initial-setup/:/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/sbin/nologin
chrony:x:986:981::/var/lib/chrony:/sbin/nologin
dnsmasq:x:985:980:Dnsmasq DHCP and DNS server:/var/lib/dnsmasq:/sbin/nologin
tcpdump:x:72:72:://sbin/nologin
systemd-oom:x:978:978:systemd Userspace 00M Killer:/:/usr/sbin/nologin
akram:x:1000:1000:Akram :/home/akram:/bin/bash
apache:x:48:48:Apache:/usr/share/httpd:/sbin/nologin
user1:x:1001:1001::/home/user1:/bin/bash
lakramglocalnost ~15
```

```
rtkit:x:172:172:RealtimeKit:/proc:/sbin/nologin
sssd:x:995:991:User for sssd:/:/sbin/nologin
libstoragemgmt:x:994:990:daemon account for libstoragemgmt:/var/run/lsm:/sbin/nologin
setroubleshoot:x:993:989:SELinux troubleshoot server:/var/lib/setroubleshoot:/sb
in/nologin
pipewire:x:992:987:PipeWire System Daemon:/var/run/pipewire:/sbin/nologin
avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin
geoclue:x:991:986:User for geoclue:/var/lib/geoclue:/sbin/nologin
flatpak:x:990:985:User for flatpak system helper:/:/sbin/nologin
gdm:x:42:42::/var/lib/gdm:/sbin/nologin
cockpit-ws:x:989:984:User for cockpit web service:/nonexisting:/sbin/nologin
cockpit-wsinstance:x:988:983:User for cockpit-ws instances:/nonexisting:/sbin/nologin
gnome-initial-setup:x:987:982::/run/gnome-initial-setup/:/sbin/nologin
shd:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/sbin/nologin
dnsmasq:x:986:981::/var/lib/chrony:/sbin/nologin
dnsmasq:x:986:981::/var/lib/chrony:/sbin/nologin
systemd-oom:x:72:72::/:/sbin/nologin
systemd-oom:x:978:978:systemd Userspace OOM Killer:/:/usr/sbin/nologin
skram:x:1000:1000:Akram :/home/akram:/bin/bash
apache:x:48:48:Abache:/usr/share/httpd://sbin/nologin
user1:x:1001:1002!:/home/user1:/bin/bash
[akram@localhost ~]$
```

## mkdir {os-concepts,ubuntu-is-the-best}



cd os-concepts

touch file1,file2

ls

```
akram@localhost~]$ mkdir {os-concepts, ubuntu-is-the-best} {akram@localhost~]$ mkdir {os-concepts, ubuntu-is-the-best} {akram@localhost~]$ ts

cat Documents Music Pictures Templates Videos
Desktop Downloads os-concepts Public ubuntu-is-the-best
[akram@localhost os-concepts]$ touch file1, file2
[akram@localhost os-concepts]$ ts
file1, file2
[akram@localhost os-concepts]$
```

```
oldsymbol{f \oplus}
                          akram@localhost:~/ubuntu-is-the-best
                                                                      Q
                                                                           ×
[akram@localhost ~]$ mkdir {os-concepts,ubuntu-is-the-best}
[akram@localhost ~]$ ls
[akram@localhost ~]$ cd os-concepts/
[akram@localhost os-concepts]$ touch file1,file2
[akram@localhost os-concepts]$ ls
file1,file2
[akram@localhost os-concepts]$ cd ..
[akram@localhost ~]$ cd ubuntu-is-the-best/
[akram@localhost ubuntu-is-the-best]$ touch file1,file2
[akram@localhost ubuntu-is-the-best]$ ls
file1,file2
[akram@localhost ubuntu-is-the-best]$ rm file1,file2
[akram@localhost ubuntu-is-the-best]$ ls
[akram@localhost ubuntu-is-the-best]$ touch file1.txt,file2.txt
[akram@localhost ubuntu-is-the-best]$ ls
file1.txt,file2.txt
[akram@localhost ubuntu-is-the-best]$ ls -l
total 0
-rw-rw-r--. 1 akram akram 0 Oct 8 12:41 file1.txt,file2.txt
[akram@localnost ubuntu-is-the-best]$
```

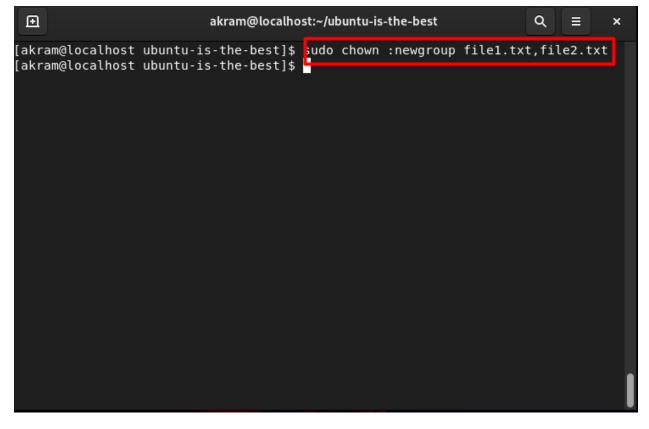
```
akram@localhost:~/ubuntu-is-the-best Q = x

[akram@localhost ~]$ cd ubuntu-is-the-best/
[akram@localhost ubuntu-is-the-best]$ ls -l
total 0
-rw-rw-r--. 1 akram akram 0 Oct 8 12:41 file1.txt,file2.txt
[akram@localhost ubuntu-is-the-best]$ chmod 640 file1.txt,file2.txt
[akram@localhost ubuntu-is-the-best]$ is -i
total 0
-rw-r----. 1 akram akram 0 Oct 8 12:41 file1.txt,file2.txt
[akram@localhost ubuntu-is-the-best]$ 

[akram@localhost ubuntu-is-the-best]$ 

[akram@localhost ubuntu-is-the-best]$
```

```
ⅎ
                                         akram@localhost:~
                                                                                     Q
                                                                                           ≡
                                                                                                  ×
[akram@localhost ~]$ <mark>sudo groupadd -g 1010 newgroup</mark>
[akram@localhost ~]$ car /erc/group | rail
slocate:x:21:
dnsmasq:x:980:
tcpdump:x:72:
sgx:x:979:
systemd-oom:x:978:
akram:x:1000:
apache:x:48:
user1:x:1001:
group1:x:1002:
newgroup:x:1010:
[akram@localhost ~]$
```



```
ⅎ
                                 akram@localhost:~
                                                                     Q
                                                                          ≡
                                                                                ×
slocate:x:21:
dnsmasq:x:980:
tcpdump:x:72:
sgx:x:979:
systemd-oom:x:978:
akram:x:1000:
apache:x:48:
user1:x:1001:
group1:x:1002:
newgroup:x:1010:
[akram@localhost ~]$ sudo usermod -a -G newgroup user1
[sudo] password for akram:
[akram@localhost ~]$ cat /etc/group | tail
slocate:x:21:
dnsmasq:x:980:
tcpdump:x:72:
sgx:x:979:
systemd-oom:x:978:
akram:x:1000:
apache:x:48:
user1:x:1001:
group1:x:1002:
newgroup:x:1010:user1
[akram@localhost ~]$
```

```
oldsymbol{f \oplus}
                                         akram@localhost:~
                                                                                     Q
                                                                                                  ×
user1:x:1001:
group1:x:1002:
newgroup:x:1010:
[akram@localhost ~]$ sudo usermod -a -G newgroup user1
[sudo] password for akram:
[akram@localhost ~]$ cat /etc/group | tail
slocate:x:21:
dnsmasq:x:980:
tcpdump:x:72:
sgx:x:979:
systemd-oom:x:978:
akram:x:1000:
apache:x:48:
user1:x:1001:
group1:x:1002:
newgroup:x:1010:user1
[akram@localhost ~]$ echo "crash" > ~/os-concepts/crash.in
[akram@localhost ~]$ echo "crash" > ~/ubuntu-is-the-best/crash.in
[akram@localhost ~]$ echo "crash" > ~/Desktop/crash.in
[akram@localhost ~]$ find ~/ -name "crash.in"
/home/akram/Desktop/crash.in
/home/akram/os-concepts/crash.in
/home/akram/ubuntu-is-the-best/crash.in
[akram@localhost ~]$
```

