



dbda@IACSD: ~



To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

dbda@IACSD:~\$ pwd

/home/dbda

dbda@IACSD:~\$ touch songs{1..6}.mp3

dbda@IACSD:~\$ touch snap{1..6}.jpg film{1..6}.avi

dbda@IACSD:~\$ ls

Desktop	film2.avi	film6.avi	snap	snap4.jpg	songs2.mp3	songs6.mp3
Documents	film3.avi	Music	snap1.jpg	snap5.jpg	songs3.mp3	Templates
Downloads	film4.avi	Pictures	snap2.jpg	snap6.jpg	songs4.mp3	Videos
film1.avi	film5.avi	Public	snap3.jpg	songs1.mp3	songs5.mp3	

dbda@IACSD:~\$



Home



dbda@IACSD: ~/Videos



```
dbda@IACSD:~$ touch songs{1..6}.mp3
dbda@IACSD:~$ touch snap{1..6}.jpg film{1..6}.avi
dbda@IACSD:~$ ls
Desktop    film2.avi  film6.avi  snap       snap4.jpg  songs2.mp3  songs6.mp3
Documents  film3.avi  Music      snap1.jpg  snap5.jpg  songs3.mp3  Templates
Downloads  film4.avi  Pictures   snap2.jpg  snap6.jpg  songs4.mp3  Videos
film1.avi  film5.avi  Public     snap3.jpg  songs1.mp3  songs5.mp3
dbda@IACSD:~$ mv songs{1..6}.mp3 ~/Music/
dbda@IACSD:~$ mv snap{1..6}.jpg ~/Picture
mv: target '/home/dbda/Picture' is not a directory
dbda@IACSD:~$ mv snap{1..6}.jpg ~/Pictures/
dbda@IACSD:~$ mv film{1..6}.avi ~/Videos/
dbda@IACSD:~$ cd Music
dbda@IACSD:~/Music$ ls
songs1.mp3  songs2.mp3  songs3.mp3  songs4.mp3  songs5.mp3  songs6.mp3
dbda@IACSD:~/Music$ cd ..
dbda@IACSD:~$ cd Pictures
dbda@IACSD:~/Pictures$ ls
snap1.jpg  snap2.jpg  snap3.jpg  snap4.jpg  snap5.jpg  snap6.jpg
dbda@IACSD:~/Pictures$ cd ..
dbda@IACSD:~$ cd Videos
dbda@IACSD:~/Videos$ ls
film1.avi  film2.avi  film3.avi  film4.avi  film5.avi  film6.avi
dbda@IACSD:~/Videos$
```



Home



dbda@IACSD: ~



```
└─ Videos
   ├── film1.avi
   ├── film2.avi
   ├── film3.avi
   ├── film4.avi
   ├── film5.avi
   └── film6.avi
```

24 directories, 30 files

dbda@IACSD:~\$ cd Videos

dbda@IACSD:~/Videos\$ cp snap{1..2}.* ../other

cp: cannot stat 'snap1.*': No such file or directory

cp: cannot stat 'snap2.*': No such file or directory

dbda@IACSD:~/Videos\$ cp snap{1..2}.* ../others

cp: target '../others' is not a directory

dbda@IACSD:~/Videos\$ cp snap{1..2}.* ../other

cp: cannot stat 'snap1.*': No such file or directory

cp: cannot stat 'snap2.*': No such file or directory

dbda@IACSD:~/Videos\$ cp snap{1..2}.* ../others

cp: target '../others' is not a directory

dbda@IACSD:~/Videos\$ cp snap{1..2}.* ../other

cp: cannot stat 'snap1.*': No such file or directory

cp: cannot stat 'snap2.*': No such file or directory

dbda@IACSD:~/Videos\$ cp film{1..2}.* ../other

dbda@IACSD:~/Videos\$ cd ..

dbda@IACSD:~\$ cd Music/

dbda@IACSD:~/Music\$ cp songs{1..2}.* ../other

dbda@IACSD:~/Music\$ cd ..

dbda@IACSD:~\$ cd Pictures/

dbda@IACSD:~/Pictures\$ cp snap{1..2}.* ../other

dbda@IACSD:~/Pictures\$ cd ..

dbda@IACSD:~\$ tree

```
└─ Desktop
   ├── Documents
   ├── Downloads
   └── family
       ├── film1.avi
       ├── film2.avi
       └── snap1.jpg
```



dbda@IACSD: ~



Documents

Downloads

family

film1.avi

film2.avi

snap1.jpg

snap2.jpg

songs1.mp3

songs2.mp3

friends

film1.avi

film2.avi

snap1.jpg

snap2.jpg

songs1.mp3

songs2.mp3

Music

songs1.mp3

songs2.mp3

songs3.mp3

songs4.mp3

songs5.mp3

songs6.mp3

other

film1.avi

film2.avi

snap1.jpg

snap2.jpg

songs1.mp3

songs2.mp3

Pictures

snap1.jpg

snap2.jpg

snap3.jpg

snap4.jpg

snap5.jpg

snap6.jpg

Public

snap

snapd-desktop-integration



dbda@IACSD: ~/friends



```
├── film2.avi
├── film3.avi
├── film4.avi
├── film5.avi
└── film6.avi
```

24 directories, 24 files

dbda@IACSD:~\$ cd family/

dbda@IACSD:~/family\$ ls

dbda@IACSD:~/family\$ cd friends

bash: cd: friends: No such file or directory

dbda@IACSD:~/family\$ cd ..

dbda@IACSD:~\$ cd friends

dbda@IACSD:~/friends\$ tree

```
├── film1.avi
├── film2.avi
├── snap1.jpg
├── snap2.jpg
├── songs1.mp3
└── songs2.mp3
```

0 directories, 6 files

dbda@IACSD:~/friends\$



Home



dbda@IACSD: ~/family



```
├── songs2.mp3
├── Pictures
│   ├── snap1.jpg
│   ├── snap2.jpg
│   ├── snap3.jpg
│   ├── snap4.jpg
│   ├── snap5.jpg
│   └── snap6.jpg
├── Public
├── snap
│   └── snapd-desktop-integration
│       ├── 83
│       │   ├── Desktop
│       │   ├── Documents
│       │   ├── Downloads
│       │   ├── Music
│       │   ├── Pictures
│       │   ├── Public
│       │   ├── Templates
│       │   └── Videos
│       ├── common
│       └── current -> 83
├── Templates
└── Videos
    ├── film1.avi
    ├── film2.avi
    ├── film3.avi
    ├── film4.avi
    ├── film5.avi
    └── film6.avi
```

24 directories, 36 files

dbda@IACSD:~\$ cd ls

bash: cd: ls: No such file or directory

dbda@IACSD:~\$ ls

Desktop Documents Downloads family friends Music other Pictures Public snap Templates Videos

dbda@IACSD:~\$ cd family/

dbda@IACSD:~/family\$ rm -r *

dbda@IACSD:~/family\$ ls

dbda@IACSD:~/family\$



dbda@IACSD: ~



```
├── Music
├── Pictures
├── Public
├── Templates
├── Videos
├── common
├── current -> 83
├── Templates
├── Videos
│   ├── film1.avi
│   ├── film2.avi
│   ├── film3.avi
│   ├── film4.avi
│   ├── film5.avi
│   └── film6.avi
```

21 directories, 18 files

dbda@IACSD:~\$ mkdir friends

dbda@IACSD:~\$ mkdir family

dbda@IACSD:~\$ mkdir other

dbda@IACSD:~\$ ls

Desktop	Downloads	friends	other	Public	Templates
Documents	family	Music	Pictures	snap	Videos

dbda@IACSD:~\$



Home



root@IACSD: /tmp/iacsd



```
-rw-rw-r-- 1 prince prince 0 Mar 11 14:57 project-4
prince@IACSD:/tmp/iacsd$ exit
exit
dbda@IACSD:~$ sudo -s
root@IACSD:/home/dbda# chown tom project-1
chown: cannot access 'project-1': No such file or directory
root@IACSD:/home/dbda# chown tom /tmp/iacsd/project-1
root@IACSD:/home/dbda# cd /tmp/iacsd
root@IACSD:/tmp/iacsd# chown dac project-2
chown: invalid user: 'dac'
root@IACSD:/tmp/iacsd# chgrp dac project-2
root@IACSD:/tmp/iacsd# chown dac project-3
chown: invalid user: 'dac'
root@IACSD:/tmp/iacsd# chown tom project-3
root@IACSD:/tmp/iacsd# chmod 600 project-1
root@IACSD:/tmp/iacsd# chmod 600 project-3
root@IACSD:/tmp/iacsd# ls -l
total 0
-rw----- 1 tom prince 0 Mar 11 14:57 project-1
-rw-rw-r-- 1 prince dac 0 Mar 11 14:57 project-2
-rw----- 1 tom prince 0 Mar 11 14:57 project-3
-rw-rw-r-- 1 prince prince 0 Mar 11 14:57 project-4
root@IACSD:/tmp/iacsd# chgrp dbda project-4
root@IACSD:/tmp/iacsd# ls -s
total 0
0 project-1 0 project-2 0 project-3 0 project-4
root@IACSD:/tmp/iacsd# ls -l
total 0
-rw----- 1 tom prince 0 Mar 11 14:57 project-1
-rw-rw-r-- 1 prince dac 0 Mar 11 14:57 project-2
-rw----- 1 tom prince 0 Mar 11 14:57 project-3
-rw-rw-r-- 1 prince dbda 0 Mar 11 14:57 project-4
root@IACSD:/tmp/iacsd# chmod 600 project-4
root@IACSD:/tmp/iacsd# ls -l
total 0
-rw----- 1 tom prince 0 Mar 11 14:57 project-1
-rw-rw-r-- 1 prince dac 0 Mar 11 14:57 project-2
-rw----- 1 tom prince 0 Mar 11 14:57 project-3
-rw----- 1 prince dbda 0 Mar 11 14:57 project-4
root@IACSD:/tmp/iacsd#
```




dbda@IACSD: ~



```
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:106:113:TPM software stack,,,:/var/lib/tpm:/bin/false
uidd:x:107:116:/:/run/uidd:/usr/sbin/nologin
systemd-oom:x:108:117:systemd Userspace OOM Killer,,,:/run/systemd:/usr/sbin/nologin
tcpdump:x:109:118:/:/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
dbda:x:1000:1000:DBDA,,,:/home/dbda:/bin/bash
tom:x:1001:1005:,,,:/home/tom:/bin/bash
bob:x:1002:1000:,,,:/home/bob:/bin/bash
sam:x:1003:1006:,,,:/home/sam:/bin/bash
prince:x:1004:1004:,,,:/home/prince:/bin/bash
dbda@IACSD:~$
```



prince@IACSD: /tmp/iacsd



```
dbda@IACSD:~$ ls
Desktop  Documents  Downloads  family  Music  other  Pictures  Public  snap  Templates  Videos
dbda@IACSD:~$ cd
dbda@IACSD:~$ cd
dbda@IACSD:~$ ls
Desktop  Documents  Downloads  family  Music  other  Pictures  Public  snap  Templates  Videos
dbda@IACSD:~$ su prince
Password:
prince@IACSD:/home/dbda$ pwd
/home/dbda
prince@IACSD:/home/dbda$ exit
exit
dbda@IACSD:~$ su prince
Password:
prince@IACSD:/home/dbda$ cd ..
prince@IACSD:/home$ cd prince/
prince@IACSD:~$ pwd
/home/prince
prince@IACSD:~$ ls
prince@IACSD:~$ cd ..
prince@IACSD:/home$ cd ..
prince@IACSD:/$ ls
bin  cdrom  etc  lib  lib64  lost+found  mnt  proc  run  snap  swapfile  tmp  var
boot  dev  home  lib32  libx32  media  opt  root /sbin  srv  sys  usr
prince@IACSD:/$ cd tmp
prince@IACSD:/tmp$ mkdir iacsd
prince@IACSD:/tmp$ cd iacsd/
prince@IACSD:/tmp/iacsd$ touch project
prince@IACSD:/tmp/iacsd$ rm project
prince@IACSD:/tmp/iacsd$ touch project-{1..4}
prince@IACSD:/tmp/iacsd$ ls
project-1  project-2  project-3  project-4
prince@IACSD:/tmp/iacsd$
```



dbda@IACSD: /home



BAD PASSWORD: The password is shorter than 8 characters

Retype new password:

passwd: password updated successfully

Changing the user information for sam

Enter the new value, or press ENTER for the default

Full Name []:

Room Number []:

Work Phone []:

Home Phone []:

Other []:

Is the information correct? [Y/n] y

dbda@IACSD:~\$

dbda@IACSD:~\$ sudo adduser prince

Adding user `prince' ...

Adding new group `prince' (1004) ...

Adding new user `prince' (1004) with group `prince' ...

Creating home directory `/home/prince' ...

Copying files from `/etc/skel' ...

New password:

BAD PASSWORD: The password is a palindrome

Retype new password:

Sorry, passwords do not match.

New password:

BAD PASSWORD: The password is shorter than 8 characters

Retype new password:

passwd: password updated successfully

Changing the user information for prince

Enter the new value, or press ENTER for the default

Full Name []:

Room Number []:

Work Phone []:

Home Phone []:

Other []:

Is the information correct? [Y/n] y

dbda@IACSD:~\$ ls

Desktop Documents Downloads family Music other Pictures Public snap Templates Videos

dbda@IACSD:~\$ cd ..

dbda@IACSD:/home\$ ls

bob dbda prince sam tom

dbda@IACSD:/home\$



dbda@IACSD: /home



```
Home Phone []:  
Other []:  
Is the information correct? [Y/n] y
```

```
dbda@IACSD:~$  
dbda@IACSD:~$ sudo adduser prince  
Adding user `prince' ...  
Adding new group `prince' (1004) ...  
Adding new user `prince' (1004) with group `prince' ...  
Creating home directory `/home/prince' ...  
Copying files from `/etc/skel' ...  
New password:  
BAD PASSWORD: The password is a palindrome  
Retype new password:  
Sorry, passwords do not match.  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: password updated successfully  
Changing the user information for prince  
Enter the new value, or press ENTER for the default  
Full Name []:  
Room Number []:  
Work Phone []:  
Home Phone []:  
Other []:
```

```
Is the information correct? [Y/n] y
```

```
dbda@IACSD:~$ ls  
Desktop Documents Downloads family Music other Pictures Public snap Templates Videos  
dbda@IACSD:~$ cd ..  
dbda@IACSD:/home$ ls  
bob dbda prince sam tom  
dbda@IACSD:/home$ sudo addgroup dac  
Adding group `dac' (GID 1005) ...  
Done.  
dbda@IACSD:/home$ sudo addgroup dbda  
addgroup: The group `dbda' already exists.  
dbda@IACSD:/home$ sudo addgroup ditiss  
Adding group `ditiss' (GID 1006) ...  
Done.  
dbda@IACSD:/home$
```



root@IACSD: /tmp/iacsd



dbda@IACSD:~\$ su prince

Password:

prince@IACSD:/home/dbda\$ cd ..

prince@IACSD:/home\$ cd prince/

prince@IACSD:~\$ pwd

/home/prince

prince@IACSD:~\$ ls

prince@IACSD:~\$ cd ..

prince@IACSD:/home\$ cd ..

prince@IACSD:\$ ls

bin	cdrom	etc	lib	lib64	lost+found	mnt	proc	run	snap	swapfile	tmp	var
boot	dev	home	lib32	libx32	media	opt	root	sbin	srv	sys	usr	

prince@IACSD:\$ cd tmp

prince@IACSD:/tmp\$ mkdir iacsd

prince@IACSD:/tmp\$ cd iacsd/

prince@IACSD:/tmp/iacsd\$ touch project

prince@IACSD:/tmp/iacsd\$ rm project

prince@IACSD:/tmp/iacsd\$ touch project-{1..4}

prince@IACSD:/tmp/iacsd\$ ls

project-1 project-2 project-3 project-4

prince@IACSD:/tmp/iacsd\$ ls -l

total 0

-rw-rw-r-- 1 prince prince 0 Mar 11 14:57 project-1

-rw-rw-r-- 1 prince prince 0 Mar 11 14:57 project-2

-rw-rw-r-- 1 prince prince 0 Mar 11 14:57 project-3

-rw-rw-r-- 1 prince prince 0 Mar 11 14:57 project-4

prince@IACSD:/tmp/iacsd\$ exit

exit

dbda@IACSD:~\$ sudo -s

root@IACSD:/home/dbda# chown tom project-1

chown: cannot access 'project-1': No such file or directory

root@IACSD:/home/dbda# chown tom /tmp/iacsd/project-1

root@IACSD:/home/dbda# cd /tmp/iacsd

root@IACSD:/tmp/iacsd# chown dac project-2

chown: invalid user: 'dac'

root@IACSD:/tmp/iacsd# chgrp dac project-2

root@IACSD:/tmp/iacsd# chown dac project-3

chown: invalid user: 'dac'

root@IACSD:/tmp/iacsd# chown tom project-3

root@IACSD:/tmp/iacsd#



dbda@IACSD: ~



```
Public
snap
├── snapd-desktop-integration
│   ├── 83
│   │   ├── Desktop
│   │   ├── Documents
│   │   ├── Downloads
│   │   ├── Music
│   │   ├── Pictures
│   │   ├── Public
│   │   ├── Templates
│   │   └── Videos
│   ├── common
│   └── current -> 83
├── Templates
└── Videos
    ├── film1.avi
    ├── film2.avi
    ├── film3.avi
    ├── film4.avi
    ├── film5.avi
    └── film6.avi
```

24 directories, 36 files

```
dbda@IACSD:~$ cd ls
```

```
bash: cd: ls: No such file or directory
```

```
dbda@IACSD:~$ ls
```

```
Desktop Documents Downloads family friends Music other Pictures Public snap Templates Videos
```

```
dbda@IACSD:~$ cd family/
```

```
dbda@IACSD:~/family$ rm -r *
```

```
dbda@IACSD:~/family$ ls
```

```
dbda@IACSD:~/family$ cd ..
```

```
dbda@IACSD:~$ cd friends/
```

```
dbda@IACSD:~/friends$ rm -r *
```

```
dbda@IACSD:~/friends$ ls
```

```
dbda@IACSD:~/friends$ cd ..
```

```
dbda@IACSD:~$ rm -r friends/
```

```
dbda@IACSD:~$ ls
```

```
Desktop Documents Downloads family Music other Pictures Public snap Templates Videos
```

```
dbda@IACSD:~$
```