

```
rvu@rvu-OptiPlex-SFF-7020:~$ ls
Desktop  Documents  Downloads  hari  home  linux  Manu.R  Music  out3  Pictures  Public  snap  study  Templates  testuser  Videos
rvu@rvu-OptiPlex-SFF-7020:~$ cd Desktop
rvu@rvu-OptiPlex-SFF-7020:~/Desktop$ cd Manu.R
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ pwd
/home/rvu/Desktop/Manu.R
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ ls -l
total 28
-rw-rw-r-- 1 rvu rvu      79 Feb 10 14:21 a1
-rw-rw-r-- 1 rvu rvu     60 Feb 10 14:26 a1.c
-rwxrwxr-x 1 rvu rvu 15960 Feb 10 14:31 a.out
-rw-rw-r-- 1 rvu rvu     60 Feb 10 14:31 prog.c
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ ls -la
.  ..  a1  a1.c  a.out  prog.c
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ nano prog.c
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ gcc prog.c prog
/usr/bin/ld: cannot find prog: No such file or directory
collect2: error: ld returned 1 exit status
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ gcc prog.c -o pro
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ ./pro
Hello
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ sleep 30
^C
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ sleep 1
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ sleep &
[1] 8682
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ sleep: missing operand
Try 'sleep --help' for more information.
^C
[1]+  Exit 1                  sleep
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ sleep 30 &
[1] 8683
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ jobs
[1]+  Running                  sleep 30 &
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ notepad.exe
notepad.exe: command not found
[1]+  Done                    sleep 30
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ jobs
```

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[1]+  Exit 1                  sleep
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ sleep 30 &
[1] 8683
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ jobs
[1]+  Running                  sleep 30 &
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ notepad.exe
notepad.exe: command not found
[1]+  Done                     sleep 30
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ jobs
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ ls
a1  a1.c  pro  prog.c
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ jobs
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ fg|bg
bash: bg: no job control
bash: fg: no job control
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ kill
kill: usage: kill [-s sigspec | -n signum | -sigspec] pid | jobspec ... or kill -l [sigspec]
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ ps
  PID TTY          TIME CMD
  8596 pts/0    00:00:00 bash
  8710 pts/0    00:00:00 ps
rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R$ pstree
systemd--ModemManager--3*[{ModemManager}]
        --NetworkManager--3*[{NetworkManager}]
        --accounts-daemon--3*[{accounts-daemon}]
        --avahi-daemon--avahi-daemon
        --bluetoothd
        --colord--3*[{colord}]
        --cron
        --cups-browsed--3*[{cups-browsed}]
        --cupsd
        --dbus-daemon
        --fwupd--5*[{fwupd}]
        --gdm3--gdm-session-wor--gdm-wayland-ses--gnome-session-b--3*[{gnome-session-b}]
                |               |               |
                |               |               +--3*[{gdm-wayland-ses}]
                |               +--3*[{gdm-session-wor}]
                +--3*[{gdm3}]
```



```
├─thermalld(1275)─┬─{thermalld}(1338)
                  ├──{thermalld}(1339)
                  ├──{thermalld}(1352)
                  └─{thermalld}(1513)
├─udisksd(1276)─┬─{udisksd}(1321)
                 ├──{udisksd}(1323)
                 ├──{udisksd}(1355)
                 ├──{udisksd}(1417)
                 └─{udisksd}(1424)
├─unattended-upgr(1523)──{unattended-upgr}(1552)
├─upowerd(1507)─┬─{upowerd}(1509)
                 ├──{upowerd}(1510)
                 └─{upowerd}(1511)
└─wpa_supplicant(1365)
```

rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R\$ ps -o pid

PID

8596

8722

rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R\$ ps -o ppid

PPID

8589

8596

rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R\$ ps -o cmd

CMD

bash

ps -o cmd

rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R\$ nano a1.sh

rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R\$ chmod +x a1.sh

rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R\$ ./a1.sh

Parent PID:8932

PID PPID CMD

8596 8589 bash

8932 8596 /bin/bash ./a1.sh

8933 8932 sleep 20

8934 8932 ps -o pid,ppid,cmd

rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R\$ nano a1.sh

rvu@rvu-OptiPlex-SFF-7020:~/Desktop/Manu.R\$

GNU nano 7.2 a1.sh

```
#!/bin/bash
echo "Parent PID:$$"
sleep 20 &
ps -o pid,ppid,cmd
```

```
#include <stdio.h>
int main(){
printf("Hello");
return 0;
}
```