

EJERCICIO 1

atd)

\$ ps -Fp 996

```
juanka1995@juanka-desktop ~ $ ps -Fp 996
UID      PID  PPID  C   SZ   RSS  PSR  STIME TTY          TIME CMD
daemon   996    1    0  6511 2044    3  12:30 ?           00:00:00 /usr/sbin/atd -f
```

Su padre es el proceso *init* (PID=1), no tiene terminal asociado y es un demonio.

crond)

\$ ps -Fp 1167

```
[root@localhost ~]# ps -Fp 1167
UID      PID  PPID  C   SZ   RSS  PSR  STIME TTY          TIME CMD
root     1167    1    0   948 1176    0  06:45 ?           00:00:00 crond
```

Su padre es el proceso *init* (PID=1), no tiene terminal asociado y pertenece al usuario root.

EJERCICIO 2

generar-apunte.sh

```
1 #!/bin/bash
2 find ~ -maxdepth 1 > listahome-`date +%Y-%j-%T-$$_`
```

```
juanka1995@juanka-desktop ~/practicass/so $ at now + 1 minutes
warning: commands will be executed using /bin/sh
at> sh ./genera-apunte.sh
at> <EOT>
job 5 at Sun Oct 23 22:06:00 2016
juanka1995@juanka-desktop ~/practicass/so $ date
Sun Oct 23 22:05:38 CEST 2016
juanka1995@juanka-desktop ~/practicass/so $ ls
Fedora14-x86-root_fs.gz  kernel32-3.0.4.gz  paquetes.zip
genera-apunte.sh         paquetes            script
juanka1995@juanka-desktop ~/practicass/so $ date
Sun Oct 23 22:06:04 CEST 2016
juanka1995@juanka-desktop ~/practicass/so $ ls
Fedora14-x86-root_fs.gz  kernel32-3.0.4.gz  paquetes            script
genera-apunte.sh         listahome-2016-297-22:06:00-5039  paquetes.zip
juanka1995@juanka-desktop ~/practicass/so $ cat listahome-2016-297-22\06\00-5039
/home/juanka1995
/home/juanka1995/.face
/home/juanka1995/.ICEauthority
/home/juanka1995/.dmrc
/home/juanka1995/.thunderbird
```

El archivo de salida se genera en el directorio donde hemos realizado la llamada al demonio at.

EJERCICIO 3

- a) `juanka1995@juanka-desktop ~/practicass/so $ at midnight`
warning: commands will be executed using /bin/sh
at> ls ./ > midnight
at> <EOT>
- b) `juanka1995@juanka-desktop ~/practicass/so $ at midnight + 1 minutes`
warning: commands will be executed using /bin/sh
at> ls -/ > midnight_+1
at> <EOT>
- c) `juanka1995@juanka-desktop ~/practicass/so $ at 17:30 tomorrow`
warning: commands will be executed using /bin/sh
at> ls -/ > 17_30_tomorrow
at> <EOT>
- d) `juanka1995@juanka-desktop ~/practicass/so $ at Dec 25`
warning: commands will be executed using /bin/sh
at> ls ./ > dec_25_2016
at> <EOT>
- e) `juanka1995@juanka-desktop ~/practicass/so $ at midnight Jan 1`
warning: commands will be executed using /bin/sh
at> ls ./ > midnight_1_jan
at> <EOT>

Con la orden *atq* podemos ver los trabajos pendientes, y con la orden *atrm* y el n.º de trabajo podemos eliminar uno en concreto.

```
juanka1995@juanka-desktop ~ $ atq
14      Sun Jan  1 00:00:00 2017 a juanka1995
11      Mon Oct 24 00:01:00 2016 a juanka1995
13      Sun Dec 25 22:20:00 2016 a juanka1995
10      Mon Oct 24 00:00:00 2016 a juanka1995
12      Mon Oct 24 17:30:00 2016 a juanka1995
juanka1995@juanka-desktop ~ $ atrm 14
juanka1995@juanka-desktop ~ $ atrm 12
juanka1995@juanka-desktop ~ $ atq
11      Mon Oct 24 00:01:00 2016 a juanka1995
13      Sun Dec 25 22:20:00 2016 a juanka1995
10      Mon Oct 24 00:00:00 2016 a juanka1995
```

EJERCICIO 4

- 20) Herada el que tenia el proceso que invocó a at.
21) La máscara es 0022, y la hereda.
22) Tambien las hereda.

EJERCICIO 5

```
juanka1995@juanka-desktop ~/practicass/so $ at -f ejercicio_4_5.sh now + 1 minutes
warning: commands will be executed using /bin/sh
job 15 at Sun Oct 23 22:37:00 2016
```

```
daemon    6083    945  0  22:36 ?  0  00:00:00 /usr/sbin/atd -f
juanka1+  6084    6083  0  22:36 ?  0  00:00:00 sh
juanka1+  6086    6084  0  22:36 ?  0  00:00:00 ps -ef
Mi pid = 6084
```

Es hijo del demonio atd.

EJERCICIO 6

ejercicio_4_6.sh

```
#!/bin/bash
find ~ -mtime 1 1>~/modificados_`date +%Y:%d-%H:%M:%S`
```

```
juanka1995@juanka-desktop ~/practicass/so $ at -f ejercicio_4_6.sh tomorrow
warning: commands will be executed using /bin/sh
job 16 at Mon Oct 24 22:55:00 2016
```

EJERCICIO 7

ejercicio_4_7.sh

```
#!/bin/bash
while true
do
    echo `date`;
    sleep 60;
done
```

```
juanka1995@juanka-desktop ~/practicass/so $ sh ejercicio_4_7.sh &
[1] 7272
juanka1995@juanka-desktop ~/practicass/so $ sh ejercicio_4_7.sh &
[2] 7279
juanka1995@juanka-desktop ~/practicass/so $ sh ejercicio_4_7.sh &
[3] 7281
juanka1995@juanka-desktop ~/practicass/so $ sh ejercicio_4_7.sh &
[4] 7283
juanka1995@juanka-desktop ~/practicass/so $ sh ejercicio_4_7.sh &
[5] 7285
juanka1995@juanka-desktop ~/practicass/so $ sh ejercicio_4_7.sh &
[6] 7287
```

ejercicio_4_7_b.sh

```
#!/bin/bash
echo "Por fin he podido ejecutarme\n" > ~/ejercicio_4_7_b
```

```
juanka1995@juanka-desktop ~/practicass/so $ batch
warning: commands will be executed using /bin/sh
at> sh ./ejercicio_4_7_b.sh
at> <EOT>
job 22 at Sun Oct 23 23:13:00 2016
juanka1995@juanka-desktop ~/practicass/so $ ls ~
Desktop  Downloads  Music  Pictures  Programs  Templates
Documents  Dropbox  NetBeansProjects  practicas  Public  Videos
juanka1995@juanka-desktop ~/practicass/so $ jobs
[1]  Running                sh ./ejercicio_4_7.sh &
[2]  Running                sh ./ejercicio_4_7.sh &
[3]  Running                sh ./ejercicio_4_7.sh &
[4]  Running                sh ./ejercicio_4_7.sh &
[5]  Running                sh ./ejercicio_4_7.sh &
[6]  Running                sh ./ejercicio_4_7.sh &
[7]  Running                sh ./ejercicio_4_7.sh &
[8]  Running                sh ./ejercicio_4_7.sh &
[9]  Running                sh ./ejercicio_4_7.sh &
[10] Running                sh ./ejercicio_4_7.sh &
[11] Running                sh ./ejercicio_4_7.sh &
[12] Running                sh ./ejercicio_4_7.sh &
```

```
juanka1995@juanka-desktop ~/practicass/so $ kill -9 $(jobs -p)
[1]  Killed                  sh ./ejercicio_4_7.sh
[2]  Killed                  sh ./ejercicio_4_7.sh
[3]  Killed                  sh ./ejercicio_4_7.sh
[4]  Killed                  sh ./ejercicio_4_7.sh
[5]  Killed                  sh ./ejercicio_4_7.sh
[6]  Killed                  sh ./ejercicio_4_7.sh
[7]  Killed                  sh ./ejercicio_4_7.sh
[8]  Killed                  sh ./ejercicio_4_7.sh
[9]  Killed                  sh ./ejercicio_4_7.sh
[10] Killed                  sh ./ejercicio_4_7.sh
```

```

juanka1995@juanka-desktop ~/practicass/so $ ls ~
Desktop Downloads ejercicio_4_7_b NetBeansProjects practicas Public Videos
Documents Dropbox Music Pictures Programs Templates
juanka1995@juanka-desktop ~/practicass/so $ cat ~/ejercicio_4_7_b
Por fin he podido ejecutarme

```

EJERCICIO 8

```

Open [icon] 4_8_c.sh
~/practicass/so
File Edit View Search Tools Documents Help
1 #/bin/bash
2 echo "Tengo la mayor prioridad\n" > ~/4_8_c

Open [icon] 4_8_d.sh
~/practicass/so
File Edit View Search Tools Documents Help
1 #/bin/bash
2 echo "Tengo menos prioridad que el c\n" > ~/4_8_d

Open [icon] 4_8_e.sh
~/practicass/so
File Edit View Search Tools Documents Help
1 #/bin/bash
2 echo "Tengo menos prioridad\n" > ~/4_8_e
~

```

```

juanka1995@juanka-desktop ~/practicass/so $ at -q c -f 4_8_c.sh now + 5 minutes
warning: commands will be executed using /bin/sh
job 23 at Sun Oct 23 23:31:00 2016
juanka1995@juanka-desktop ~/practicass/so $ at -q d -f 4_8_d.sh now + 5 minutes
warning: commands will be executed using /bin/sh
job 24 at Sun Oct 23 23:31:00 2016
juanka1995@juanka-desktop ~/practicass/so $ at -q e -f 4_8_e.sh now + 5 minutes
warning: commands will be executed using /bin/sh
job 25 at Sun Oct 23 23:31:00 2016
juanka1995@juanka-desktop ~/practicass/so $ atq -q c
23 Sun Oct 23 23:31:00 2016 c juanka1995
juanka1995@juanka-desktop ~/practicass/so $ atq -q d
24 Sun Oct 23 23:31:00 2016 d juanka1995
juanka1995@juanka-desktop ~/practicass/so $ atq -q e
25 Sun Oct 23 23:31:00 2016 e juanka1995
juanka1995@juanka-desktop ~/practicass/so $

```

Efectivamente al realizar un ls de los ficheros que crea cada script podemos ver que el c se ha creado antes que el d y este antes que el e.

EJERCICIO 9

cron4

```

* * * * * /home/juanka1995/practicass/so/ejercicio_4_5.sh

```

```

juanka1995@juanka-desktop ~/practicass/so $ crontab cron4_9
juanka1995@juanka-desktop ~/practicass/so $ crontab -l
* * * * * /home/juanka1995/practicass/so/ejercicio_4_5.sh

```

```

juanka1995@juanka-desktop ~/practicass/so $ ls ~
2016-298-00:46:01 Documents Dropbox NetBeansProjects practicas Public Videos
Desktop Downloads Music Pictures Programs Templates
juanka1995@juanka-desktop ~/practicass/so $ cat ~/2016-298-00\:46\:01

```

```

root 11556 1 0 00:45 ? 00:00:00 /lib/systemd/systemd-hostnamed
root 11563 941 0 00:46 ? 00:00:00 /usr/sbin/CRON -f
juanka1+ 11564 11563 0 00:46 ? 00:00:00 /bin/sh -c /home/juanka1995/practicass/so/ejercicio_4_5.sh
juanka1+ 11565 11564 0 00:46 ? 00:00:00 /bin/bash /home/juanka1995/practicass/so/ejercicio_4_5.sh
juanka1+ 11567 11565 0 00:46 ? 00:00:00 ps -ef
Mi pid = 11565

```

Podemos observar que es hijo del proceso sh, el cual es hijo del proceso cron. El fichero se crea por defecto en el HOME del usuario actual y no en el directorio donde se lanzó la orden, que era como lo hacía el demonio at.

EJERCICIO 10

```
juanka1995@juanka-desktop ~/practicass/so $ mkdir /tmp/varios
juanka1995@juanka-desktop ~/practicass/so $ touch /tmp/varios/core{1..9}
juanka1995@juanka-desktop ~/practicass/so $ ls -l /tmp/varios/
total 0
-rw-r--r-- 1 juanka1995 juanka1995 0 Oct 24 01:20 core1
-rw-r--r-- 1 juanka1995 juanka1995 0 Oct 24 01:20 core2
-rw-r--r-- 1 juanka1995 juanka1995 0 Oct 24 01:20 core3
-rw-r--r-- 1 juanka1995 juanka1995 0 Oct 24 01:20 core4
-rw-r--r-- 1 juanka1995 juanka1995 0 Oct 24 01:20 core5
-rw-r--r-- 1 juanka1995 juanka1995 0 Oct 24 01:20 core6
-rw-r--r-- 1 juanka1995 juanka1995 0 Oct 24 01:20 core7
-rw-r--r-- 1 juanka1995 juanka1995 0 Oct 24 01:20 core8
-rw-r--r-- 1 juanka1995 juanka1995 0 Oct 24 01:20 core9
```

eliminacore_4_10.sh

```
#!/bin/bash
rm -v /tmp/varios/core* >> listacores|
```

core4_10

```
* * * * * /home/juanka1995/practicass/so/eliminacore_4_10.sh|
```

```
juanka1995@juanka-desktop ~/practicass/so $ crontab cron4_10
juanka1995@juanka-desktop ~/practicass/so $ crontab -l
* * * * * /home/juanka1995/practicass/so/eliminacore_4_10.sh
juanka1995@juanka-desktop ~/practicass/so $ ls ~
Desktop  Downloads  Music      Pictures   Programs  Templates
Documents Dropbox    NetBeansProjects practicas Public     Videos
juanka1995@juanka-desktop ~/practicass/so $ date
Mon Oct 24 01:22:28 CEST 2016
juanka1995@juanka-desktop ~/practicass/so $ ls ~
Desktop  Dropbox    NetBeansProjects Programs  Videos
Documents listacores Pictures    Public
Downloads Music      practicas  Templates
juanka1995@juanka-desktop ~/practicass/so $ date
Mon Oct 24 01:23:03 CEST 2016
juanka1995@juanka-desktop ~/practicass/so $ cat ~/listacores
removed '/tmp/varios/core1'
removed '/tmp/varios/core2'
removed '/tmp/varios/core3'
removed '/tmp/varios/core4'
removed '/tmp/varios/core5'
removed '/tmp/varios/core6'
removed '/tmp/varios/core7'
removed '/tmp/varios/core8'
removed '/tmp/varios/core9'
```

EJERCICIO 11

reducelista_4_11.sh

```
#!/bin/bash
head -n 10 ~/listacores > ~/temp
rm ~/listacores
mv ~/temp ~/listacores|
```

cron4_11

```
* * * * * /home/juanka1995/practicass/so/reducelista_4_11.sh|
```

```
juanka1995@juanka-desktop ~/practicass/so $ crontab cron4_11
juanka1995@juanka-desktop ~/practicass/so $ crontab -l
* * * * * /home/juanka1995/practicass/so/reducelista_4_11.sh
```

EJERCICIO 12

ejercicio_4_12.sh

```
#!/bin/bash
echo `date` - $PATH > /home/juanka1995/practicas/so/listabusqueda
```

cron4_12

```
* * * * * /home/juanka1995/practicas/so/ejercicio_4_12.sh|
```

```
juanka1995@juanka-desktop ~/practicas/so $ crontab cron4_12
juanka1995@juanka-desktop ~/practicas/so $ crontab -l
* * * * * /home/juanka1995/practicas/so/ejercicio_4_12.sh
juanka1995@juanka-desktop ~/practicas/so $ ls
cron4_12          Fedora14-x86-root_fs.gz  listabusqueda  paquetes.zip
ejercicio_4_12.sh kernel32-3.0.4.gz        paquetes        script
juanka1995@juanka-desktop ~/practicas/so $ cat listabusqueda
Mon Oct 24 01:37:53 CEST 2016 - /usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games
juanka1995@juanka-desktop ~/practicas/so $ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games
```

En ambos casos se obtiene la misma lista de busqueda.