

Taller de Introducción a Linux #1

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Aspectos Básicos de la computación
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```
~/workspace$ PS1='hola mundo $ '
hola mundo $ PS1='\u@\w$
runner@~/workspace: $ PS1='\[\033[1;35m\]\t \d\[\033[0m\] $
13:14:11 Mon Oct 06 $ PS1='\[\033[1;35m\]\t@\[\033[0;34m\]\w\[\033[0m\]: $ '
13:16:04@~/workspace: $ echo hola
13:16:55@~/workspace: $ echo $PATH
/nix/store/bap4d@lpcrhpwmpb8ayjcgkmvfj62lng-bash-interactive-5.1-p16/bin:/nix/store/pr5n
59mb4jzmfx6kanwxly0l07p861fg-patchelf-0.15.0/bin:/nix/store/dq0xwmsk1q0i2ayq6pb7y87na2kn
zylh-gcc-wrapper-11.3.0/bin:/nix/store/1gf2flfqnpqbr1b4p4qz2f72y42bs56r-gcc-11.3.0/bin:/
nix/store/57xv61c5zi8pphjbcwxxjlgc34p61ic9-glibc-2.35-163-bin/bin:/nix/store/a7gvj343m05
j2s32xcnwr35v31ynlypr-coreutils-9.1/bin:/nix/store/1d6ian3r8kdzspw8hacjhl3xkp40g1lj-binu
tils-wrapper-2.39/bin:/nix/store/039g378vc3pc3dvi9dzdlrd0i4q93qwf-binutils-2.39/bin:/nix
/store/p1qrn27c0q3x0338vy02v67jbc8zk0ar-tree-2.0.4/bin:/nix/store/kblplvpffcfn0zprj80vh4
1xchjx4jag-wget-1.21.3/bin:/nix/store/nk3jcpqk04xbil6gk61dck9vcdcabxby-wkhtmltopdf-bin-0
.12.6-3/bin:/nix/store/1a0aw657n2v799swjfjncskjc859g6kk-imagemagick-7.1.0-52-dev/bin:/ni
x/store/hl5lsmyf6alwj91nv8kmg2iz1lbnxym9-curl-7.86.0-dev/bin:/nix/store/39m0xn31z7n44wfl
fxqq7fbjh1ik6xq7-brotli-1.0.9/bin:/nix/store/0lm4ygslgn65xi9pkw2kw29qiqqd80hz-libkrb5-1.
20-dev/bin:/nix/store/r7ql900my2fw6k33nxh2r7rzv8nv0s25-libkrb5-1.20/bin:/nix/store/n8jl8
q7kk4a03n4gjiymy4y4hpcp2apm-nghttp2-1.49.0-bin/bin:/nix/store/hfkdbq95wsm9a0zf2hz51ads25
h657hx-libidn2-2.3.2-bin/bin:/nix/store/fq47cv26nb87hwz2678r6i8ym5b57lwf-openssl-3.0.7-b
in/bin:/nix/store/mb0pcxkmrg0f6k0zaywlnvpk9q3j5ans-zstd-1.5.2-bin/bin:/nix/store/w10in9d
iagrcqqxi5lg20n3q2jfpk6pq-zstd-1.5.2/bin:/nix/store/52fbv6j49khca4cfvwm35fqd984w2520-cur
l-7.86.0-bin/bin:/nix/store/a8mhcagrsly7c7mpjrpsnaahk4aax056-bzip2-1.0.8-bin/bin:/nix/st
ore/v2lzlm6dkp9f5kjva1sza5d3hfr2k8jg-freetype-2.12.1-dev/bin:/nix/store/ifswzxzvkxjyv7rq
6i1a90vsw3n6ia1n-libpng-apng-1.6.37-dev/bin:/nix/store/wwqnsjrk9ws6dfp5chxb6r3wcawbra1y-
libjpeg-turbo-2.1.4-bin/bin:/nix/store/zlcnmqq14jz5x9439jf937mvayyl63da-xz-5.2.7-bin/bin
:/nix/store/3k4dxm0j11b2gr59ws8g5wr6v75vywml-libtiff-4.4.0-bin/bin:/nix/store/k070xa6nnh
v80pal6824n5c0b0j98zdp-lcms2-2.13.1-bin/bin:/nix/store/km4pzs3hdhch750zh039zmm6w0h4wy1r-
libwebp-1.2.4/bin:/nix/store/8s3ykb2m0z1bbbnc7mk5qawvfx9fzg7g-imagemagick-7.1.0-52/bin:/
nix/store/px06k8qs2wr0il0v7gh268cc70fqkvwh-tetex-3.0/bin:/nix/store/vkqh5k198h9pchijm6ip
wm6q7q6sa9n0-q-0.8.2/bin:/nix/store/18y8p4mjwjy26npih04hfv48wz9czgk3-attr-2.5.1-bin/bin:
```

/nix/store/q8s1kzhsblr2a1p2g@lh2dkcgca1im3z-libcap-2.66/bin:/nix/store/bvihhgw8bh6cqqlj@

```
13:17:03@~/workspace: $ which date
/nix/store/a7gvj343m05j2s32xcnwr35v31ynlypr-coreutils-9.1/bin/date
13:17:19@~/workspace: $ pwd
/home/runner/workspace
13:18:01@~/workspace: $ cd /home
13:18:09@/home: $ pwd
/home
13:18:24@/home: $ cd ...
13:18:38@/: $ pwd
13:18:42@/: $ cd ./home
13:18:49@/home: $ pwd
/home
13:18:51@/home: $ cd runner
13:19:01@~: $ pwd
/home/runner
13:19:03@~: $ ../../bin/echo hola
13:19:17@~: $ echo $HOME
/home/runner
13:19:34@~: $ cd ~
13:20:32@~: $ pwd
/home/runner
13:20:35@~: $ ls
workspace
13:20:53@~: $ cd ...
13:21:31@/home: $ ls
13:21:39@/home: $ cd /
13:21:50@/: $ ls
bin
                     media
                            opt
                                  repl sbin
     etc
             io
                                               sys
                                                    var
              lib
boot home
                     mnt
                            pid2 root
                                        srv
dev
      inject lib64
                            proc
                                  run
                                        store usr
```

```
13:21:56@/: $ cd /home
ls -l
total 0
drwxrwxrwx 1 runner runner 46 Oct 6 13:07 runner
13:22:16@/home: $ echo hello > hello.txt
bash: hello.txt: Read-only file system
13:22:52@/home: $ cat hello.txt
cat: hello.txt: No such file or directory
13:23:03@/home: $ cd Desktop
bash: cd: Desktop: No such file or directory
13:23:55@/home: $ pwd
/home
13:24:09@/home: $ cd ...
13:24:33@/: $ echo hello > hello.txt
bash: hello.txt: Read-only file system
13:24:52@/: $ cat hello.txt
cat: hello.txt: No such file or directory
13:25:05@/: $ cat < hello.txt > hello2.txt
bash: hello.txt: No such file or directory
13:25:41@/: $ cat hello2.txt
cat: hello2.txt: No such file or directory
13:26:11@/: $ cd runner
bash: cd: runner: No such file or directory
13:27:31@/: $ cd home
13:27:49@/home: $ cd runner
13:28:09@~: $ pwd
/home/runner
13:28:13@~: $ md c.c
bash: md: command not found
13:28:25@~: $ mkdir c.c
13:28:32@~: $ cd c.c
13:28:41@~/c.c: $ echo hello > hello.txt
13:28:50@~/c.c: $ cat hello.txt
```

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13:28:50@~/c.c: $ cat hello.txt
hello
13:28:57@~/c.c: $ cat < hello.txt > hello2.txt
13:29:05@~/c.c: $ cat < hello.txt > hello2.txt
13:29:12@~/c.c: $ cat hello2.txt
13:29:22@~/c.c: $ cd /bin
13:29:40@/bin: $ cd /bin
13:29:46@/bin: $ ls -l
total 29948
                               55744 Apr 5 2024 '['
-rwxr-xr-x 1 root
                    root
                              14720 Dec 5 2024 addpart
-rwxr-xr-x 1 root
                   root
                               18824 Mar 31 2024 apt
-rwxr-xr-x 1 root
                    root
                               88544 Mar 31 2024 apt-cache
-rwxr-xr-x 1 root
                    root
                   root
                               27104 Mar 31 2024 apt-cdrom
-rwxr-xr-x 1 root
                               31120 Mar 31 2024 apt-config
51680 Mar 31 2024 apt-get
-rwxr-xr-x 1 root
                   root
-rwxr-xr-x 1 root
                    root
                               28664 Mar 31 2024 apt-key
-rwxr-xr-x 1 root
                    root
-rwxr-xr-x 1 root
                               55776 Mar 31 2024 apt-mark
                    root
-rwxr-xr-x 1 root
                             35336 Apr 5 2024 arch
                    root
lrwxrwxrwx 1 root
                    root
                                  21 Apr 8 2024 awk -> /etc/alternatives/awk
                              55816 Apr 5 2024 b2sum
39432 Apr 5 2024 base32
39432 Apr 5 2024 base64
35336 Apr 5 2024 basename
-rwxr-xr-x 1 root
                   root
                   root
-rwxr-xr-x 1 root
-rwxr-xr-x 1 root
                    root
-rwxr-xr-x 1 root
                   root
                              47624 Apr 5 2024 basenc
                   root
-rwxr-xr-x 1 root
-rwxr-xr-x 1 root
                            1446024 Mar 31 2024 bash
                   root
-rwxr-xr-x 1 root
                    root
                                6988 Mar 31 2024 bashbug
                                  3 Apr 8 2024 captoinfo -> tic
lrwxrwxrwx 1 root
                    root
                               39384 Apr 5
-rwxr-xr-x 1 root
                    root
                                             2024
                                                   cat
-rwxr-sr-x 1 root
                    shadow
                               72184 May 30
                                             2024
                                                   chage
                               14656 Apr 28
-rwxr-xr-x 1 root
                    root
                                             2024 chattr
                               59912 Apr 5
-rwxr-xr-x 1 root
                                             2024 chcon
                    root
-rwsr-xr-x 1 root
                              72792 May 30 2024
                    root
                                                   chfn
```

```
2206 Apr 8 2024 zless
-rwxr-xr-x 1 root root
-rwxr-xr-x 1 root
                  root
                            1842 Apr
                                     8
                                        2024
                                              zmore
                            4577 Apr 8
-rwxr-xr-x 1 root
                  root
                                        2024
                                              znew
13:29:52@/bin: $ ls -l | tail -n1
                            4577 Apr 8 2024 znew
-rwxr-xr-x 1 root root
13:30:01@/bin: $ curl --head --silent google.com | grep Length
Content-Length: 219
13:30:11@/bin: $ cd ~/workspace
13:30:24@~/workspace: $ curl -o logo_wikimedia.png https://upload.wikimedia.org/wikipedi
a/commons/6/63/Wikipedia-logo.png
 % Total % Received % Xferd Average Speed
                                                            Time Current
Left Speed
                                             Time
                                                    Time
                              Dload Upload
                                             Total
                                                    Spent
                                      0 --:--:- --:-- --:--100 38692 100 3869
                      0
                           0
                                0
                      0 --:--:- 242k
2
          0 241k
13:30:36@~/workspace: $ curl -o Calendario-AcadAdm2025.pdf https://www.javerianacali.edu
.co/sites/default/files/2025-05/Calendario-AcadAdm2025.pdf
 % Total % Received % Xferd Average Speed Time
Dload Upload Total
                                                    Time
                                                             Time Current
                                                  Spent
                                                          Left Speed
                                  0
                                      0 --:--:- --:-- --:--100 4485k 100 4485
          0 30.2M
                     0 --:--: 30.4M
13:30:58@~/workspace: $ cd ~/workspace
13:31:31@~/workspace: $ mkdir hacker-lab
cd hacker-lab
13:31:37@~/workspace/hacker-lab: $ touch scanner.sh
13:31:46@~/workspace/hacker-lab: $ code scanner.sh
13:32:15@~/workspace/hacker-lab: $ chmod +x scanner.sh
13:33:02@~/workspace/hacker-lab: $ ./scanner.sh
Iniciando el escaneo...
/etc/login.defs
grep: /etc/shadow-: Permission denied
/etc/default/useradd
/etc/security/pwhistory.conf
grep: /etc/security/opasswd: Permission denied
grep: /etc/gshadow: Permission denied
/var/lib/dpkg/info/fontconfig-config.preinst
/var/lib/dpkg/info/fontconfig-config.prerm
/var/lib/dpkg/info/locales.postrm
/var/lib/dpkg/info/ca-certificates.postrm
/var/lib/dpkg/info/libgssapi-krb5-2:amd64.postinst
/var/lib/dpkg/info/xz-utils.prerm
/var/lib/dpkg/info/perl.prerm
/var/lib/dpkg/info/git.preinst
/var/lib/dpkg/info/locales.config
/var/lib/dpkg/info/ca-certificates.config
/var/lib/dpkg/info/perl.postinst
/var/lib/dpkg/info/fontconfig.postinst
/var/lib/dpkg/info/openssl.postinst
/var/lib/dpkg/info/fonts-dejavu-core.postrm
/var/lib/dpkg/info/ca-certificates.postinst
/var/lib/dpkg/info/locales.postinst
/var/lib/dpkg/info/git.prerm
Escaneo completado.
13:33:13@~/workspace/hacker-lab: $ ./scanner.sh
Escaneo completado. Revisa el archivo scan_report.txt para los resultados.
13:34:14@~/workspace/hacker-lab: $ cat scan_report.txt
```