Linux 1

```
/home: cat hello.txt
 ~/workspace$ uname -a
Linux 89f69e841078 6.2.16 #1-NixOS SMP PREEMPT_DYNAMIC Tue Jan 1 00:
 00:00 UTC 1980 x86_64 GNU/Linux
   ~/workspace$ echo TQM
  TOM
   ~/workspace$ PS1='hola mundo $ '
  hola mundo $ PS1='\u@\w$
  runner@~/workspace$ PS1='\[\033[0;32m\]\u\[\033[0m\]@\[\033[0;34m\]\w\[\033[0m\]: $ '
  runner@~/workspace: $ PS1='\mariana@\w$ '\mariana@~/workspace$ ^C\mariana@~/workspace$ PS1='mariana@\w$ '
  mariana@~/workspace$ PS1='\[\033[0;32m\]\u\[\033[0m\]@\[\033[0;34m\]\
  w\[\033[0m\]: $ '
                    @~/workspace: $ PS1='\[\033[1;35m\]\t \d\[\033[0m\] $ '
 13:15:49 Mon Oct 06 $ date
Mon Oct 6 01:16:24 PM UTC 2025
13:16:24 Mon Oct 06 $ echo hola
  hola
13:16:49 Mon Oct 06 $ echo $PATH
/nix/store/bap4d0lpcrhpwmpb8ayjcgkmvfj62lnq-bash-interactive-5.1-p16/
bin:/nix/store/pr5n59mb4jzmfx6kanwxly0l07p861fg-patchelf-0.15.0/bin:/
nix/store/dq0xwmsk1g0i2ayg6pb7y87na2knzylh-gcc-wrapper-11.3.0/bin:/nix/store/dq0xwmsk1g0i2ayg6pb7y87na2knzylh-gcc-wrapper-11.3.0/bin:/nix/store/57
xv61c5zi8pphjbcwxxjlgc34p61ic9-glibc-2.35-163-bin/bin:/nix/store/a7gv
j343m05j2s32xcnwr35v31ynlypr-coreutils-9.1/bin:/nix/store/1d6ian3r8kd
zspw8hacjhl3xkp40g1lj-binutils-wrapper-2.39/bin:/nix/store/1d6ian3r8kd
zspw8hacjhl3xkp40g1lj-binutils-wrapper-2.39/bin:/nix/store/039g378vc3
pc3dvi9dzdlrd0i4q93qwf-binutils-2.39/bin:/nix/store/p1qrn27c0q3x0338v
y02v67jbc8zk0ar-tree-2.0.4/bin:/nix/store/kblplvpffcfn0zprj80vh41xchj
x4jag-wget-1.21.3/bin:/nix/store/nk3jcpqk04xbil6gk61dck9vcdcabxby-wkh
tmltopdf-bin-0.12.6-3/bin:/nix/store/1a0aw657n2v799swjfoskjc859g6kk
-imagemagick-7.1.0-52-dev/bin:/nix/store/1blsmyf6alwj91nv8kmg2iz1lbn
xym9-curl-7.86.0-dev/bin:/nix/store/39m0xn31z7n44wflfxqq7fbjh1ik6xq7-brotli-1.0.9/bin:/nix/store/0lm4ygslgn65xi9pkw2kw29qiqqd80hz-libkrb5-
   13:16:49 Mon Oct 06 $ echo $PATH
```

1.20-dev/bin:/nix/store/r7gl900my2fw6k33nxh2r7rzv8nv0s25-libkrb5-1.20
/bin:/nix/store/n8jl8q7kk4a03n4gjiymy4y4hpcp2apm-nghttp2-1.49.0-bin/b
in:/nix/store/hfkdbq95wsm9a0zf2hz51ads25h657hx-libidn2-2.3.2-bin/bin:
/nix/store/fq47cv26nb87hw22678r6i8ym5b57lwf-openssl-3.0.7-bin/bin:/nix/store/mb0pcxkmrg0f6k0zaywlnvpk9q3j5ans-zstd-1.5.2-bin/bin:/nix/store/w10in9diaqrcqqxi5lg20n3q2jfpk6pq-zstd-1.5.2/bin:/nix/store/52fbv6j4
9khca4cfvwm35fqd984w2520-curl-7.86.0-bin/bin:/nix/store/a8mhcagrsly7c
7mpjrpsnaahk4aax056-bzip2-1.0.8-bin/bin:/nix/store/v2lzlm6dkp9f5kjva1
sza5d3hfr2k8jg-freetype-2.12.1-dev/bin:/nix/store/ifswxzvkxjyy7rq6i1
a90vsw3n6ia1n-libpng-apng-1.6.37-dev/bin:/nix/store/wqnsjrk9ws6dfp5c
hxb6r3wcawbra1y-libjpeg-turbo-2.1.4-bin/bin:/nix/store/lcnmqq14jz5x9
439jf937mvayyl63da-xz-5.2.7-bin/bin:/nix/store/8dv4x00j11b2gr59ws8g5w
r6v75vywml-libtiff-4.4.0-bin/bin:/nix/store/k070xa6nnhv80pal6824n5c0b
0j98zdp-lcms2-2.13.1-bin/bin:/nix/store/km4pzs3hdhch750zh039zmm6w0h4w
y1r-libwebp-1.2.4/bin:/nix/store/ss3ykb2m0z1bbbnc/mk5qawvfx9fzg7g-uma
gemagick-7.1.0-52/bin:/nix/store/px06k8qs2wr0il0v7gh268cc70fqkvwh-tet
ex-3.0/bin:/nix/store/vkqh5k198h9pchijm6ipwm6q7g6sa9n0-q-0.8.2/bin:/n
ix/store/18y8p4mjwjy26npih04hfv48wz9czgk3-attr-2.5.1-bin/bin:/nix/store/bvihng
w8bh6cqqlj0d4s8cvmm4mqmzfc-pulseaudio-16.1/bin:/nix/store/bvihng
w8bh6cqqlj0d4s8cvmm4mqmzfc-pulseaudio-16.1/bin:/nix/store/by3g5bmhxwmygnugrep-3.7/bin:/nix/store/hxcdqw4jrjnd37wxqgsd47hd0j8bnj09-gawk-5.1.
1/bin:/nix/store/cfbhw8r8ags41vwqaz47r583d0p4h4a1-gnutar-1.34/bin:/ni
x/store/p3m1ndl1lapwrlh698bnb5lvxh67378-gzip-1.12/bin:/nix/store/mbl
gz65m3zv9x548a3d5m96fj2pbwr09-gnumake-4.3/bin:/nix/store/dajp3g2mbnswmy-gnugrep-3.7/bin:/nix/store/hxcdqw4jrjnd37wxqgsd47hd0j8bnj09-gawk-5.1.
1/bin:/nix/store/cfbhw8r8ags41vwqaz47r583d0p4h4a1-gnutar-1.34/bin:/ni
x/store/p3m1ndl1lapwrlh698bnb5lvxh67378-gzip-1.12/bin:/nix/store/mbl
gz65m3zv9x548a3d5m96fj2pbwr09-gnumake-4.3/bin:/nix/store/v8flbg3g246hdbd
k2rfdimqddhq6m8m8fqs-bash-5.1-p16/bin:/nix/store/v8flbg1bin-/nix/store/by6g3g246hd

/home:cat hello.txt

```
/home:cat hello.txt
13:17:21 Mon Oct 06 $ which date
/nix/store/a7gvj343m05j2s32xcnwr35v31ynlypr-coreutils-9.1/bin/date
13:17:44 Mon Oct 06 $ pwd
/home/runner/workspace
13:18:28 Mon Oct 06 $ cd /home
13:18:40 Mon Oct 06 $ pwd
/home
13:18:44 Mon Oct 06 $ cd..
bash: cd..: command not found
13:18:55 Mon Oct 06 $ pwd
13:19:02 Mon Oct 06 $ cd ..
13:19:15 Mon Oct 06 $ pwd
13:19:19 Mon Oct 06 $ cd ./home
13:19:27 Mon Oct 06 $ pwd
/home
13:19:29 Mon Oct 06 $ cd runner
13:19:37 Mon Oct 06 $ pwd
/home/runner
 13:19:38 Mon Oct 06 $ ../../bin/echo hola
hola
13:19:51 Mon Oct 06 $ echo $HOME
 /home/runner
 13:21:00 Mon Oct 06 $ cd ~
13:21:11 Mon Oct 06 $ pwd
/home/runner
13:21:13 Mon Oct 06 $ ls
 workspace
13:21:23 Mon Oct 06 $ cd ..
13:21:29 Mon Oct 06 $ ls
13:21:31 Mon Oct 06 $ cd / 13:21:38 Mon Oct 06 $ ls
```

```
~/workspace; cat hello2.txt
13:19:51 Mon Oct 06 $ echo $HOME
/home/runner
13:21:00 Mon Oct 06 $ cd ~ 13:21:11 Mon Oct 06 $ pwd
/home/runner
13:21:13 Mon Oct 06 $ ls
workspace
13:21:23 Mon Oct 06 $ cd ..
13:21:29 Mon Oct 06 $ ls
13:21:31 Mon Oct 06 $ cd /
13:21:38 Mon Oct 06 $ ls
bin etc
boot home
                io
lib
                            media opt repl sbin
mnt pid2 root srv
                                                                  sys var
                             mnt
dev inject lib64 nix
                                       proc run store usr
13:21:40 Mon Oct 06 $ cd /home
ls -l
total 0
drwxrwxrwx 1 runner runner 46 Oct 6 13:05 runner
13:22:17 Mon Oct 06 $ echo hello > hello.txt
bash: hello.txt: Read-only file system
13:26:34 Mon Oct 06 $ cat hello.txt cat: hello.txt: No such file or directory
13:26:44 Mon Oct 06 $ ls
13:38:35 Mon Oct 06 $ cd runner
13:38:44 Mon Oct 06 $ cd workspace
13:39:00 Mon Oct 06 $ echo hello > hello.txt
13:39:17 Mon Oct 06 $ cat hello.txt
hello
13:39:26 Mon Oct 06 $ cat < hello.txt > hello2.txt
13:42:14 Mon Oct 06 $ cat hello2.txt
hello
13:42:23 Mon Oct 06 $
```

```
~/workspace; curl -o Calendario-AcadAdm2025.pdf https://www.jave... ○ 前 ×
13:42:23 Mon Oct 06 $ PS1='\u@\w$ 'runner@~/workspace$ PS1='\[\033[0;32m\]\u\[\033[0m\]@\[\033[0;34m\]\w
\[\033[0m\]: $ '
 unner@~/workspace: $ cd /bin
unner@/bin: $ ls -l
total 29948
                                       55744 Apr 5 2024 '['
14720 Dec 5 2024 ad
18824 Mar 31 2024 ap
88544 Mar 31 2024 ap
27104 Mar 31 2024 ap
31120 Mar 31 2024 ap
51680 Mar 31 2024 ap
 -rwxr-xr-x 1 root
                          root
 -rwxr-xr-x 1 root
                           root
 -rwxr-xr-x 1 root
                           root
 -rwxr-xr-x
                           root
 -rwxr-xr-x
                 root
                           root
 -rwxr-xr-x
              1 root
                           root
                                                                   apt-config
 -rwxr-xr-x
              1 root
                          root
                                                          2024
2024
2024
2024
2024
                                        28664 Mar 31
 -rwxr-xr-x
              1 root
                          root
-rwxr-xr-x 1 root
-rwxr-xr-x 1 root
lrwxrwxrwx 1 root
                                        55776 Mar 31
                          root
                                           336 Apr 5
21 Apr 8
                          root
                                        35336 Apr
                          root
                                                                   awk -> /etc/alterna
                                                          2024
2024
2024
2024
-rwxr-xr-x 1 root
                                        55816 Apr
39432 Apr
                          root
-rwxr-xr-x 1 root
                          root
                                        39432 Apr
-rwxr-xr-x 1 root
                          root
                                        35336 Apr
-rwxr-xr-x 1 root
                          root
                                                          2024
2024
-rwxr-xr-x 1 root
                                        47624 Apr
                          root
 -rwxr-xr-x
                                      1446024 Mar 31
              1 root
                          root
                                                          2024
2024
                                         6988 Mar 31
-rwxr-xr-x
              1 root
                          root
                                                      8
                                                                   captoinfo -> tic
lrwxrwxrwx
              1 root
                          root
                                             3 Apr
                                        39384 Apr
                                                           2024
-rwxr-xr-x
                root
                          root
                                        72184 May 30
                                                           2024
 -rwxr-sr-x
                          shadow
              1 root
                                                          2024
2024
2024
2024
2024
2024
                                        14656 Apr 28
 -rwxr-xr-x
                          root
                 root
 -rwxr-xr-x
                                        59912 Apr
                 root
                          root
                                        72792 May 30
-rwsr-xr-x
                 root
                          root
 -rwxr-xr-x
                                        59912 Apr
                          root
                 root
                                                       5
 -rwxr-xr-x
                 root
                          root
                                        55816 Apr
                                                       5
                                                           2024
 -rwxr-xr-x 1 root
                          root
                                        22912 Dec
```

```
v ~/workspace:curl -o Calendario-AcadAdm2025.pdf https://www.jave... 🔾 🎁 🗙
                              31008 Jan 28 2025
-rwxr-xr-x 1 root
                    root
-rwxr-xr-x 1 root
                                 29 Apr
                    root
                                         8
                                             2024
                                                   zegrep
-rwxr-xr-x 1 root
                                  29 Apr
                    root
                                          8
                                             2024
                                                   zfgrep
-rwxr-xr-x 1 root
                                2081 Apr
                                          8
                                             2024
                    root
-rwxr-xr-x 1 root
                                8103 Apr
                                          8
                                             2024
                    root
                                                   zgrep
                                          8 12:47
-rwxr-xr-x 1 root
                               70193 Apr
                    root
-rwxr-xr-x 1 root
                    root
                                2206 Apr
                                          8
                                             2024
                                                   zless
                                1842 Apr
-rwxr-xr-x 1 root
                    root
                                         8
                                             2024
-rwxr-xr-x 1 root
                                4577 Apr
                                          8
                                             2024
                    root
runner<mark>@/bin: $ ls -l | tail -n1</mark>
-rwxr-xr-x 1 root
                                4577 Apr 8 2024 znew
                    root
runner@/bin: $ curl --head --silent google.com | grep Length
Content-Length: 219
runner@/bin: $ cd ~/workspace
runner@~/workspace: $ curl -o logo_wikimedia.png https://upload.wikim
edia.org/wikipedia/commons/6/63/Wikipedia-logo.png
% Total % Received % Xferd Average Speed T
                                                  Time
                                                           Time
                                                                    Tim
e Current
                                  Dload Upload
                                                 Total
                                                          Spent
                                                                    Lef
t Speed
             0
                   0
  0
       0
                        0
                              0
                                      0
                                             0 --:--:--
100 38692 100 38692
                                             0 --:--:--
                        0
                              0
                                   210k
runner@~/workspace: $ curl -o Calendario-AcadAdm2025.pdf https://www.
javerianacali.edu.co/sites/default/files/2025-05/Calendario-AcadAdm20
25.pdf
  % Total
             % Received % Xferd Average Speed
                                                  Time
                                                           Time
                                                                    Tim
e Current
                                  Dload Upload
                                                  Total
                                                          Spent
                                                                    Lef
t Speed
  0
             0
        0
                                             0 --:--:-- --:--
                                  22.8M
100 4485k
           100 4485k
                        0
                               0
                                             0 --:--:--
:-- 22.9M
runner@~/workspace: $
```

```
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    Shell
    Shell

                                                            ∨ ~/workspace/hacker-lab;echo \"Iniciando el escaneo...\" > scan_… 🔾 📋 🗙
runner@~/workspace: $ cd ~/workspace
runner@~/workspace: $ mkdir hacker-lab
cd hacker-lab
runner@~/workspace/hacker-lab: $ touch scanner.sh
runner@~/workspace/hacker-lab: $ code scanner.sh
runner@~/workspace/hacker-lab: $ chmod +x scanner.sh
        nner@~/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/ppasswd: Permission denied
grep: /etc/gshadow: Permission denied
/etc/debconf.conf
grep: /etc/.pwd.lock: Permission denied
/etc/pam.d/chpasswd
 /etc/pam.d/other
/etc/pam.d/newusers
/etc/pam.d/su
/etc/pam.d/su-l
 /etc/pam.d/common-password
 /etc/pam.d/chsh
/etc/pam.d/login
/etc/pam.d/chfn
 /etc/pam.d/passwd
 grep: /etc/gshadow-: Permission denied
 grep: /etc/shadow: Permission denied
grep: /etc/ssl/private: Permission denied
/etc/ssl/openssl.cnf
grep: /var/cache/ldconfig: Permission denied
grep: /var/cache/apt/archives/lock: Permission denied
 grep: /var/cache/apt/archives/partial: Permission denied
 grep: /var/cache/debconf/passwords.dat: Permission denied
```

```
/war/lib/dpkg/info/fontconfig-config.prerm
/war/lib/dpkg/info/locales.postrm
/war/lib/dpkg/info/ca-certificates.postrm
/war/lib/dpkg/info/ca-certificates.postrm
/war/lib/dpkg/info/ca-titls.prerm
/war/lib/dpkg/info/perl.prerm
/war/lib/dpkg/info/dpt.preinst
/war/lib/dpkg/info/dpt.preinst
/war/lib/dpkg/info/operl.prerm
/war/lib/dpkg/info/operl.postinst
/war/lib/dpkg/info/perl.postinst
/war/lib/dpkg/info/perl.postinst
/war/lib/dpkg/info/openssl.postinst
/w
```



