# Implementações Computacionais

## Implementação Computacional 1

Procure 5 (cinco) ou mais comandos do shell e mostre pelo menos 2 (dois) exemplos de cada

Regras:

Não vale repetir comandos que já foram mostrados no material

Só são permitidos os comandos dos diretórios /bin e /sbin

### Pesquisados

#### base64 (2)

$ echo 'annabell' | base64

YW5uYWJlbGwK

$ echo 'YW5uYWJlbGwK' | base64 --decode

annabell

#### base32 (2)

**$ echo 'annabell' | base32**

MFXG4YLCMVWGYCQ=

**$ echo 'MFXG4YLCMVWGYCQ=' | base32 --decode**

Annabell

**$ base32 --version**

base32 (GNU coreutils) 8.32

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Written by Simon Josefsson.

**$ base32 --help**

Usage: base32 [OPTION]... [FILE]

Base32 encode or decode FILE, or standard input, to standard output.

With no FILE, or when FILE is -, read standard input.

Mandatory arguments to long options are mandatory for short options too.

-d, --decode decode data

-i, --ignore-garbage when decoding, ignore non-alphabet characters

-w, --wrap=COLS wrap encoded lines after COLS character (default 76).

Use 0 to disable line wrapping

--help display this help and exit

--version output version information and exit

The data are encoded as described for the base32 alphabet in RFC 4648.

When decoding, the input may contain newlines in addition to the bytes of

the formal base32 alphabet. Use --ignore-garbage to attempt to recover

from any other non-alphabet bytes in the encoded stream.

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>

Full documentation <https://www.gnu.org/software/coreutils/base32>

or available locally via: info '(coreutils) base32 invocation'

#### date (3)

$ date

Wed Mar 31 04:48:02 PM UTC 2021

$ date --date='next day'

Thu Apr 1 05:52:01 PM UTC 2021

$ date --date='next year'

Thu Mar 31 05:52:13 PM UTC 2022

#### False (1?)

$ False.

#### True (1?)

$ True.

#### Lorem (1?)

$ lorem

Ut eius illum suscipit dolorem et culpa accusantium natus. Eos sapiente quia nihil ipsa. Blanditiis possimus similique est optio praesentium sed. Dolorum quo rerum cupiditate reiciendis voluptate nihil et voluptates. Ducimus velit consequuntur repellendus voluptatem maiores. Quasi saepe enim est possimus voluptatibus provident earum.

#### Sleep (4)

$ sleep 5s

$ sleep 5m

$ sleep 5h

$ sleep 5d

's' for seconds (the default),

'm' for minutes,

'h' for hours

'd' for days.

#### Test (2)

test 99 -lt 98 && echo "Sim." || echo "Nao."

test 98 -lt 99 && echo "Sim." || echo "Nao."

test 99 -gt 98 && echo "Sim" || echo "Não."

test 98 -gt 99 && echo "Sim" || echo "Não."

Todos Comandos

'[' head reset add-apt-repository hexdump resizepart

addpart hostid resolvectl

apropos hostname rev

apt hostnamectl rgrep

apt-add-repository i386 rm

apt-cache iconv rmdir

apt-cdrom id runcon

apt-config infocmp run-mailcap

apt-get infotocap run-parts

apt-key install rzsh

apt-mark instmodsh savelog

arch ionice script

awk ipcmk scriptlive

b2sum ipcrm scriptreplay

base32 ipcs sdiff

base64 ischroot sed

basename join see

basenc journalctl select-editor

bash json\_pp sensible-browser

bashbug kbxutil sensible-editor

bc kernel-install sensible-pager

bootctl keyring seq

bunzip2 kill setarch

busctl last setpriv

bzcat lastb setsid

bzcmp lastlog setterm

bzdiff lcf sg

bzegrep ldd sh

bzexe less sha1sum

bzfgrep lessecho sha224sum

bzgrep lessfile sha256sum

bzip2 lesskey sha384sum

bzip2recover lesspipe sha512sum

bzless lexgrog shasum

bzmore libnetcfg shred

captoinfo link shuf

cat linux32 skill

catchsegv linux64 slabtop

catman ln sleep

cautious-launcher locale snice

chage locale-check soelim

chardet localectl sort

chardetect localedef splain

chattr logger split

chcon login stat

chfn loginctl stdbuf

chgrp logname stty

chmod look su

choom lorem sudo

chown ls sudoedit

chrt lsattr sudoreplay

chsh lsblk sum

cksum lsb\_release symcryptrun

clear lscpu sync

clear\_console lsipc systemctl

cmp lslocks systemd

col lslogins systemd-analyze

colrm lsmem systemd-ask-password

column lsns systemd-cat

comm lspgpot systemd-cgls

compose lynx systemd-cgtop

corelist lzcat systemd-delta

cp lzcmp systemd-detect-virt

cpan lzdiff systemd-escape

cpan5.30-x86\_64-linux-gnu lzegrep systemd-id128

c\_rehash lzfgrep systemd-inhibit

csplit lzgrep systemd-machine-id-setup

cut lzless systemd-mount

cvtsudoers lzma systemd-notify

dash lzmainfo systemd-path

date lzmore systemd-resolve

dbus-cleanup-sockets man systemd-run

dbus-daemon mandb systemd-socket-activate

dbus-monitor manpath systemd-stdio-bridge

dbus-run-session man.REAL systemd-sysusers

dbus-send man-recode systemd-tmpfiles

dbus-update-activation-environment mawk systemd-tty-ask-password-agent

dbus-uuidgen mcookie systemd-umount

dd md5sum tabs

debconf md5sum.textutils tac

debconf-apt-progress mesg tail

debconf-communicate migrate-pubring-from-classic-gpg tar

debconf-copydb mkdir taskset

debconf-escape mkfifo tbl

debconf-set-selections mknod tee

debconf-show mktemp telnet

deb-systemd-helper more telnet.netkit

deb-systemd-invoke mount tempfile

delpart mountpoint test

df mv tic

diff namei timedatectl

diff3 nawk timeout

dir neqn tload

dircolors networkctl toe

dirmngr networkd-dispatcher top

dirmngr-client newgrp touch

dirname nice tput

dmesg nisdomainname tr

dnsdomainname nl troff

domainname nohup true

dpkg nproc truncate

dpkg-deb nroff tset

dpkg-divert nsenter tsort

dpkg-maintscript-helper numfmt tty

dpkg-query od tzselect

dpkg-realpath openssl ucf

dpkg-split pager ucfq

dpkg-statoverride partx ucfr

dpkg-trigger passwd ul

du paste umount

echo pathchk uname

edit pdb3 unattended-upgrade

egrep pdb3.8 unattended-upgrades

enc2xs perl uncompress

encguess perl5.30.3 unexpand

env perl5.30-x86\_64-linux-gnu uniq

eqn perlbug unlink

expand perldoc unlzma

expiry perlivp unshare

expr perlthanks unxz

factor pgrep update-alternatives

faillog pic update-mime-database

fallocate piconv uptime

false pidof users

fgrep pinentry utmpdump

file pinentry-curses vdir

fincore ping vmstat

find ping4 w

findmnt ping6 wall

fish pinky watch

fish\_indent pkaction watchgnupg

fish\_key\_reader pkcheck wc

flock pkcon wdctl

fmt pkexec whatis

fold pkill whereis

free pkmon which

gapplication pkttyagent who

gdbus pl2pm whoami

geqn pldd w.procps

getconf pmap write

getent pod2html write.ul

getopt pod2man www-browser

gio pod2text x86\_64

gio-querymodules pod2usage xargs

glib-compile-schemas podchecker xdg-user-dir

gpasswd podselect xdg-user-dirs-update

gpg pr xsel

gpg-agent preconv xsubpp

gpgcompose print xz

gpgconf printenv xzcat

gpg-connect-agent printf xzcmp

gpgparsemail prlimit xzdiff

gpgsm prove xzegrep

gpgsplit ps xzfgrep

gpgtar ptar xzgrep

gpgv ptardiff xzless

gpg-wks-server ptargrep xzmore

gpg-zip ptx yes

gpic pwd ypdomainname

grep pwdx zcat

gresource py3clean zcmp

groff py3compile zdiff

grog py3versions zdump

grops pydoc3 zegrep

grotty pydoc3.8 zfgrep

groups pygettext3 zforce

gsettings pygettext3.8 zgrep

gtbl pyjwt3 zipdetails

gunzip python3 zless

gzexe python3.8 zmore

gzip rbash znew

h2ph readlink zsh

h2xs realpath zsh5

hd renice

### Comandos interessantes

apt-get

base32

base64

~~basename~~

~~catman~~

~~clear console~~

~~cmp~~

date

~~dd~~

~~dircolors~~

~~domainname~~

~~du~~

false

~~gio~~

~~hd~~

~~ionice~~

~~keyring~~

locale

~~look~~

lorem

~~man~~

~~namei~~

~~nice~~

~~pic~~

ping

ping4

ping6

~~pkmon~~

~~skill~~

**sleep**

**test**

~~tic~~

true

### Dúvidas e conteúdo

Como assim? Cada diretório tem comandos diferentes?

/bin (Binaries ou Binários)

* Link simbólico para “usr/bin”
* Abriga todos os comandos que podem ser usados no terminal
* Inclui novos comandos quando um novo software é instalado
* Pode ser comparada com o “C:\Arquivos\ de\ Programas” do Windows
* Apenas os .exe ficam aqui

/sbin (System Binaries ou Binários de sistema)

* Link simbólico para /usr/sbin
* Guarda os executáveeis dos programas que precisam de permissões de admin para serem executados

**Não usar:**

**alias l="ls -la"**

**# agora o comando `ls -la` pode ser executado apenas como `l`**

Algumas variáveis úteis no shell:

$PATH -> guarda todos os diretórios que possuem executáveis, como /bin e /sbin

Como organizar os comandos?

Os comandos podem ser executados tanto em sequências ou de forma individual.

Para ciar uma sequência, existem algumas possibilidades:

1. Utilizar um ; após cada comando.

* ls; pwd -> executa o comando ls e após sua finalização, executa o comando pwd

1. Executar um comando em segundo plano com &

* ls & pwd -> começa a executar o comando ls em segundo plano, e ao mesmo tempo executa o comando pwd. Nesse caso, o comando ls fica sendo executado até que o usuário interrompa a execução dele, mesmo que ele já tenha terminado

## Implementação Computacional 2

### GitHub

**Implementação Computacional 2**

**Siga esses tutoriais:**

1. [Criando uma chave SSH](https://docs.github.com/pt/github/authenticating-to-github/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent)
2. [Adicionando uma chave SSH ao Github](https://docs.github.com/pt/github/authenticating-to-github/adding-a-new-ssh-key-to-your-github-account)

**Observações**

* Como você está usando com contêiner, siga as intruções para Linux

**Crie um gist em .txt explicando o que foi feito e se houve algum erro no processo**

### João

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**Crie um gist em .txt explicando o que foi feito e se houve algum erro no processo**

Reinstalei o Docker: <https://github.com/cciuenf/introducao_linha_de_comando/blob/main/primeira_edicao/notas_de_aula/1_docker.org>

Agora vou instalar o github: <https://github.com/cciuenf/introducao_linha_de_comando/blob/main/primeira_edicao/notas_de_aula/6_git_github.org>

sudo apt-key adv --keyserver keyserver.ubuntu.com --recv-key C99B11DEB97541F0

sudo apt-add-repository https://cli.github.com/packages

sudo apt update

sudo apt install gh