

```
MINGW64/c/Users/josue
jissue@LAPTOP-PACC49N2 MINGW64 ~
$ pwd
/c/Users/josue

jissue@LAPTOP-PACC49N2 MINGW64 ~
$ mkdir -v dir1
mkdir: created directory 'dir1'

jissue@LAPTOP-PACC49N2 MINGW64 ~
$ mkdir -v dir2
mkdir: created directory 'dir2'

jissue@LAPTOP-PACC49N2 MINGW64 ~
$ mkdir -v dir2/dir3
mkdir: created directory 'dir2/dir3'

jissue@LAPTOP-PACC49N2 MINGW64 ~
$ mkdir -v dir2/dir3/dir4
mkdir: created directory 'dir2/dir3/dir4'

jissue@LAPTOP-PACC49N2 MINGW64 ~
$ ls
'3D Objects'/'dir2/'/'Documents/'/'Menú Inicio' NTUSER.DAT(666471b5-c8c2-11ea-8430-cb5ae9d3ad7e).TM.b1f 'Saved Games'/'
AppData/'AppData/'/'Documents/'/'MicrosoftEdgeBackups/' NTUSER.DAT(666471b5-c8c2-11ea-8430-cb5ae9d3ad7e).TMContainer000000000000000001.regtrans-ms 'Searches/'
'Configuración local'/'Downloads/'/'Mis documentos' NTUSER.DAT(666471b5-c8c2-11ea-8430-cb5ae9d3ad7e).TMContainer000000000000000002.regtrans-ms 'SendTo'
Contacts/'Entorno de red' Music/ ntuser.ini Videos/
Cookies' Favorites/ NTUSER.DAT OneDrive/ 'VirtualBox VMs'/'
'Datos de programa'/'Impresoras' ntuser.dat.LOG1 Plantillas
dir1/ Links/ ntuser.dat.LOG2 Reciente

jissue@LAPTOP-PACC49N2 MINGW64 ~
$ ls -R
.:
'3D Objects'/'dir2/'/'Documents/'/'Menú Inicio' NTUSER.DAT(666471b5-c8c2-11ea-8430-cb5ae9d3ad7e).TM.b1f 'Saved Games'/'
AppData/'AppData/'/'Documents/'/'MicrosoftEdgeBackups/' NTUSER.DAT(666471b5-c8c2-11ea-8430-cb5ae9d3ad7e).TMContainer000000000000000001.regtrans-ms 'Searches/'
'Configuración local'/'Downloads/'/'Mis documentos' NTUSER.DAT(666471b5-c8c2-11ea-8430-cb5ae9d3ad7e).TMContainer000000000000000002.regtrans-ms 'SendTo'
Contacts/'Entorno de red' Music/ ntuser.ini Videos/
Cookies' Favorites/ NTUSER.DAT OneDrive/ 'VirtualBox VMs'/'
'Datos de programa'/'Impresoras' ntuser.dat.LOG1 Plantillas
dir1/ Links/ ntuser.dat.LOG2 Reciente

'./3D Objects':
desktop.ini

./AppData:
Local/ LocalLow/ Roaming/

./AppData/Local:
AAA Internet Publishing T/ 'Datos de programa' GitHubDesktop/ MicrosoftEdge/ Programs/ speech/ UnrealEngine4launcher/
```

```
MINGW64/c/Users/josue
jissue@LAPTOP-PACC49N2 MINGW64 ~
$ touch file1.txt

jissue@LAPTOP-PACC49N2 MINGW64 ~
$ touch file1.txt

jissue@LAPTOP-PACC49N2 MINGW64 ~
$ touch file2.txt

jissue@LAPTOP-PACC49N2 MINGW64 ~
$ dir
DIR: Objects dir2 Documents Impresoras ntuser.dat.LOG1 Plantillas
AppData AppData Documents Links ntuser.dat.LOG2 Reciente
Configuración local Downloads Menú Inicio NTUSER.DAT(666471b5-c8c2-11ea-8430-cb5ae9d3ad7e).TM.b1f Saved Games
Contacts Entorno de red MicrosoftEdgeBackups NTUSER.DAT(666471b5-c8c2-11ea-8430-cb5ae9d3ad7e).TMContainer000000000000000001.regtrans-ms Searches
Cookies Favorites Mis documentos NTUSER.DAT(666471b5-c8c2-11ea-8430-cb5ae9d3ad7e).TMContainer000000000000000002.regtrans-ms SendTo
Datos de programa file1.txt Music ntuser.ini Videos
dir1 file2.txt NTUSER.DAT OneDrive VirtualBox VMs

jissue@LAPTOP-PACC49N2 MINGW64 ~
$ clear
```

```
MINGW64/c/Users/josue
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ echo "hello"
hello
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ echo "hello" > hello.txt
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ echo "linux" >> hello.txt
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ echo "world" >> hello.txt
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ cat hello.txt
hello
linux
world
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ head hello.txt
hello
linux
world
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ tail -2 hello.txt
linux
world
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ tail hello.txt
hello
linux
world
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ stat hello.txt
File: hello.txt
  Size: 18          Blocks: 1          IO Block: 65536   regular file
Device: 96de20eah/2531139818d   Inode: 3659174697244673   Links: 1
Access: (0644/-rw-r--r--)  Uid: (197609/  josue)   Gid: (197609/ UNKNOWN)
Access: 2020-09-25 10:42:42.838725600 -0500
Modify: 2020-09-25 10:42:07.593302800 -0500
Change: 2020-09-25 10:42:07.593302800 -0500
 Birth: 2020-09-25 10:41:48.427443900 -0500
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ stat dir1
```

```
MINGW64/c/Users/josue
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ cp -v hello.txt dir2
'hello.txt' -> 'dir2/hello.txt'
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ cp -v hello.txt dir2/file2.txt
'hello.txt' -> 'dir2/file2.txt'
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ cp -vr dir2/*.txt dir2/dir3
'dir2/file2.txt' -> 'dir2/dir3/file2.txt'
'dir2/hello.txt' -> 'dir2/dir3/hello.txt'
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ cp -vr dir2/dir3
'dir2/dir3' -> './dir3'
'dir2/dir3/hello.txt' -> './dir3/hello.txt'
'dir2/dir3/file2.txt' -> './dir3/file2.txt'
'dir2/dir3/dir4' -> './dir3/dir4'
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ mv hello.txt dir2/dir3/dir4/h1.txt
mv: cannot move 'hello.txt' to 'dir2/dir3/dir4/h1.txt': No such file or directory
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ ls
3D Objects/  dir3/  Impresoras@  ntuser.dat.LOG2  'Saved Games'/
AppData/    Downloads/  Link@  NTUSER.DAT{666471b5-c8c2-11ea-8430-cb5ae9d3ad7e}.TM.b1f  Searches/
'Configuraci3n local'@  'Men3 Inicio'@  NTUSER.DAT{666471b5-c8c2-11ea-8430-cb5ae9d3ad7e}.TMCContainer00000000000000000001.regtrans-ms  SendTo@
Contacts/  'Entorno de red'@  MicrosoftEdgeBackups/  NTUSER.DAT{666471b5-c8c2-11ea-8430-cb5ae9d3ad7e}.TMCContainer00000000000000000002.regtrans-ms  Videos/
Cookies@  Favorites/  'Mis documentos'@  ntuser.ini  'VirtualBox VMs'/
Datos de programa'@  File2.txt  Music/  OneDrive/
dir1/  file2.txt  NTUSER.DAT  Plantillas@
dir2/  hello.txt  ntuser.dat.LOG1  Reciente@

josue@LAPTOP-PACCA9N2 MINGW64 ~
$ mkdir dir5
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ mv dir2/*.txt dir5
josue@LAPTOP-PACCA9N2 MINGW64 ~
$ mv dir5 dir50
josue@LAPTOP-PACCA9N2 MINGW64 ~
$
josue@LAPTOP-PACCA9N2 MINGW64 ~
$
```

```
MINGW64/c/Users/josue
josue@LAPTOP-PACC49N2 MINGW64 ~
$ josue@LAPTOP-PACC49N2 MINGW64 ~
bash: josue@LAPTOP-PACC49N2: command not found

josue@LAPTOP-PACC49N2 MINGW64 ~
$ $ cp -vr dir2/*.txt dir2/dir3
bash: $: command not found

josue@LAPTOP-PACC49N2 MINGW64 ~
$ "dir2/file2.txt" -> "dir2/dir3/file2.txt"

josue@LAPTOP-PACC49N2 MINGW64 ~
$ "dir2/hello.txt" -> "dir2/dir3/hello.txt"

josue@LAPTOP-PACC49N2 MINGW64 ~
$
josue@LAPTOP-PACC49N2 MINGW64 ~
$ josue@LAPTOP-PACC49N2 MINGW64 ~
bash: josue@LAPTOP-PACC49N2: command not found

josue@LAPTOP-PACC49N2 MINGW64 ~
$ $ cp -vr dir2/dir3 .
bash: $: command not found

josue@LAPTOP-PACC49N2 MINGW64 ~
$ "dir2/dir3" -> "./dir3"
bash: ./dir3: Is a directory

josue@LAPTOP-PACC49N2 MINGW64 ~
$ "dir2/dir3/hello.txt" -> "./dir3/hello.txt"

josue@LAPTOP-PACC49N2 MINGW64 ~
$ "dir2/dir3/file2.txt" -> "./dir3/file2.txt"

josue@LAPTOP-PACC49N2 MINGW64 ~
$ "dir2/dir3/dir4" -> "./dir3/dir4"
bash: ./dir3/dir4: Is a directory

josue@LAPTOP-PACC49N2 MINGW64 ~
$
josue@LAPTOP-PACC49N2 MINGW64 ~
$ josue@LAPTOP-PACC49N2 MINGW64 ~
bash: josue@LAPTOP-PACC49N2: command not found

josue@LAPTOP-PACC49N2 MINGW64 ~
$ $ mv hello.txt dir2/dir3/dir4/hi.txt
bash: $: command not found
```

```
MINGW64/c/Users/josue
josue@LAPTOP-PACC49N2 MINGW64 ~
$ ps
  PID  PPID  PGID  WINPID  TTY      UID    STIME  COMMAND
  1236   1235   1236     5860  pts/0    197609 10:51:08 /usr/bin/bash
  1235     1   1235     26604  ?        197609 10:51:07 /usr/bin/mintty
  1260   1236   1260     20656  pts/0    197609 10:51:27 /usr/bin/ps

josue@LAPTOP-PACC49N2 MINGW64 ~
$ sleep 60 &
[1] 1264

josue@LAPTOP-PACC49N2 MINGW64 ~
$ ps
  PID  PPID  PGID  WINPID  TTY      UID    STIME  COMMAND
  1264   1236   1264     9208  pts/0    197609 10:51:36 /usr/bin/sleep
  1236   1235   1236     5860  pts/0    197609 10:51:08 /usr/bin/bash
  1268   1236   1268     11328  pts/0    197609 10:51:45 /usr/bin/ps
  1235     1   1235     26604  ?        197609 10:51:07 /usr/bin/mintty

josue@LAPTOP-PACC49N2 MINGW64 ~
$ kill 12345
bash: kill: (12345) - No such process

josue@LAPTOP-PACC49N2 MINGW64 ~
$ ps
  PID  PPID  PGID  WINPID  TTY      UID    STIME  COMMAND
  1264   1236   1264     9208  pts/0    197609 10:51:36 /usr/bin/sleep
  1236   1235   1236     5860  pts/0    197609 10:51:08 /usr/bin/bash
  1235     1   1235     26604  ?        197609 10:51:07 /usr/bin/mintty
  1275   1236   1275     11216  pts/0    197609 10:52:01 /usr/bin/ps

josue@LAPTOP-PACC49N2 MINGW64 ~
$ kill -p 12345
bash: kill: p: invalid signal specification

josue@LAPTOP-PACC49N2 MINGW64 ~
$ ps
  PID  PPID  PGID  WINPID  TTY      UID    STIME  COMMAND
  1264   1236   1264     9208  pts/0    197609 10:51:36 /usr/bin/sleep
  1236   1235   1236     5860  pts/0    197609 10:51:08 /usr/bin/bash
  1235     1   1235     26604  ?        197609 10:51:07 /usr/bin/mintty
  1282   1236   1282     7436  pts/0    197609 10:52:09 /usr/bin/ps

josue@LAPTOP-PACC49N2 MINGW64 ~
$ sleep 30 &
[2] 1286

josue@LAPTOP-PACC49N2 MINGW64 ~
$ sleep 30 &
```

```
MINGW64/c/Users/josue
josue@LAPTOP-PACC49N2 MINGW64 ~
$ ps
  PID   PPID   PGID   WINPID  TTY      UID    STIME  COMMAND
  1264   1236   1264     9208   pts/0    197609 10:51:36 /usr/bin/sleep
  1236   1235   1236     5860   pts/0    197609 10:51:08 /usr/bin/bash
  1235     1   1235     26604   ?        197609 10:51:07 /usr/bin/minTTY
  1282   1236   1282     7436   pts/0    197609 10:52:09 /usr/bin/ps

josue@LAPTOP-PACC49N2 MINGW64 ~
$ sleep 30 &
[2] 1286

josue@LAPTOP-PACC49N2 MINGW64 ~
$ sleep 30 &
[3] 1290

josue@LAPTOP-PACC49N2 MINGW64 ~
$ ps
  PID   PPID   PGID   WINPID  TTY      UID    STIME  COMMAND
  1290   1236   1290     23840   pts/0    197609 10:52:29 /usr/bin/sleep
  1294   1236   1294     20100   pts/0    197609 10:52:59 /usr/bin/ps
  1236   1235   1236     5860   pts/0    197609 10:51:08 /usr/bin/bash
  1235     1   1235     26604   ?        197609 10:51:07 /usr/bin/minTTY
[1] Done sleep 60
[2]- Done sleep 30

josue@LAPTOP-PACC49N2 MINGW64 ~
$ killall sleep
bash: killall: command not found
[3]+ Done sleep 30

josue@LAPTOP-PACC49N2 MINGW64 ~
$ killall -u user
bash: killall: command not found

josue@LAPTOP-PACC49N2 MINGW64 ~
$ killall -w find
bash: killall: command not found

josue@LAPTOP-PACC49N2 MINGW64 ~
$ pidof bash
bash: pidof: command not found

josue@LAPTOP-PACC49N2 MINGW64 ~
$ pidof -s bash
bash: pidof: command not found

josue@LAPTOP-PACC49N2 MINGW64 ~
$ |
```

```
MINGW64/c/Users/josue
josue@LAPTOP-PACC49N2 MINGW64 ~
$ time ls -l
total 5942
drwxr-xr-x 1 josue 197609 0 sep. 12 13:21 '3D Objects/'
drwxr-xr-x 1 josue 197609 0 jul. 18 01:48 AppData/
lrwxrwxrwx 1 josue 197609 28 jul. 18 01:47 'Configuración local' -> /c/Users/josue/AppData/Local/
drwxr-xr-x 1 josue 197609 0 sep. 12 13:21 Contacts/
lrwxrwxrwx 1 josue 197609 58 jul. 18 01:47 Cookies -> /c/Users/josue/AppData/Local/Microsoft/Windows/INetCookies/
lrwxrwxrwx 1 josue 197609 30 jul. 18 01:47 'Datos de programa' -> /c/Users/josue/AppData/Roaming/
drwxr-xr-x 1 josue 197609 0 sep. 25 10:28 dir1/
drwxr-xr-x 1 josue 197609 0 sep. 25 10:49 dir2/
drwxr-xr-x 1 josue 197609 0 sep. 25 10:46 dir3/
drwxr-xr-x 1 josue 197609 0 sep. 25 10:47 dir50/
drwxr-xr-x 1 josue 197609 0 nov. 16 2019 Documents/
drwxr-xr-x 1 josue 197609 0 sep. 25 10:05 Downloads/
lrwxrwxrwx 1 josue 197609 66 jul. 18 01:47 'Entorno de red' -> /c/Users/josue/AppData/Roaming/Microsoft/Windows/Network Shortcuts/
drwxr-xr-x 1 josue 197609 0 sep. 12 13:21 Favorites/
-rw-r--r-- 1 josue 197609 0 sep. 25 10:40 file1.txt
-rw-r--r-- 1 josue 197609 0 sep. 25 10:40 file2.txt
-rw-r--r-- 1 josue 197609 18 sep. 25 10:42 hello.txt
lrwxrwxrwx 1 josue 197609 66 jul. 18 01:47 Impresoras -> /c/Users/josue/AppData/Roaming/Microsoft/Windows/Printer Shortcuts/
drwxr-xr-x 1 josue 197609 0 sep. 12 13:21 Links/
lrwxrwxrwx 1 josue 197609 59 jul. 18 01:47 'Menú Inicio' -> /c/Users/josue/AppData/Roaming/Microsoft/Windows/Start Menu/
drwxr-xr-x 1 josue 197609 0 nov. 16 2019 MicrosoftEdgeBackups/
lrwxrwxrwx 1 josue 197609 24 jul. 18 01:47 'Mis documentos' -> /c/Users/josue/Documents/
drwxr-xr-x 1 josue 197609 0 sep. 12 13:21 Music/
-rw-r--r-- 1 josue 197609 3670016 sep. 14 12:37 NTUSER.DAT
-rw-r--r-- 1 josue 197609 1036288 jul. 18 01:47 ntuser.dat.LOG1
-rw-r--r-- 1 josue 197609 147456 jul. 18 01:47 ntuser.dat.LOG2
-rw-r--r-- 1 josue 197609 65536 jul. 18 01:47 NTUSER.DAT{666471b5-c8c2-11ea-8430-cb5ae9d3ad7e}.TM.blf
-rw-r--r-- 1 josue 197609 524288 jul. 18 01:47 NTUSER.DAT{666471b5-c8c2-11ea-8430-cb5ae9d3ad7e}.TMContainer00000000000000000001.regtrans-ms
-rw-r--r-- 1 josue 197609 524288 jul. 18 01:47 NTUSER.DAT{666471b5-c8c2-11ea-8430-cb5ae9d3ad7e}.TMContainer00000000000000000002.regtrans-ms
-rw-r--r-- 1 josue 197609 20 jul. 18 01:54 ntuser.ini
drwxr-xr-x 1 josue 197609 0 sep. 25 10:02 OneDrive/
lrwxrwxrwx 1 josue 197609 58 jul. 18 01:47 Plantillas -> /c/Users/josue/AppData/Roaming/Microsoft/Windows/Templates/
lrwxrwxrwx 1 josue 197609 55 jul. 18 01:47 Reciente -> /c/Users/josue/AppData/Roaming/Microsoft/Windows/Recent/
drwxr-xr-x 1 josue 197609 0 sep. 12 13:21 'Saved Games/'
drwxr-xr-x 1 josue 197609 0 sep. 12 13:21 Searches/
lrwxrwxrwx 1 josue 197609 55 jul. 18 01:47 SendTo -> /c/Users/josue/AppData/Roaming/Microsoft/Windows/SendTo/
drwxr-xr-x 1 josue 197609 0 sep. 18 19:25 Videos/
drwxr-xr-x 1 josue 197609 0 sep. 25 10:28 'VirtualBox Vms/'
[1]+ Done nice -n 19 sleep 30

real 0m0.057s
user 0m0.000s
sys 0m0.061s

josue@LAPTOP-PACC49N2 MINGW64 ~
$ |
```

```
MINGW64/c/Users/josue
josue@LAPTOP-PACC49N2 MINGW64 ~
$ echo -e "col1 col2 r1\ncol5 col6 r2\ncol3 col4 r3 " >> new.txt
josue@LAPTOP-PACC49N2 MINGW64 ~
$ echo -e "Hello\nlinux\nProgrammers paradise" >> linux.txt
josue@LAPTOP-PACC49N2 MINGW64 ~
$ cut -f1 -d' ' new.txt
col1
col5
col3
josue@LAPTOP-PACC49N2 MINGW64 ~
$ cut -f3 -d' ' new.txt
r1
r2
r3
josue@LAPTOP-PACC49N2 MINGW64 ~
$ paste hello new.txt
paste: hello: No such file or directory
josue@LAPTOP-PACC49N2 MINGW64 ~
$ paste -s hello new.txt
paste: hello: No such file or directory
col1 col2 r1    col5 col6 r2    col3 col4 r3
josue@LAPTOP-PACC49N2 MINGW64 ~
$ sort new.txt
col1 col2 r1
col3 col4 r3
col5 col6 r2
josue@LAPTOP-PACC49N2 MINGW64 ~
$ diff hello linux.txt.
diff: hello: No such file or directory
diff: linux.txt.: No such file or directory
josue@LAPTOP-PACC49N2 MINGW64 ~
$
```