

Ubuntu 24.04.3 LTS Feb 4 07:23

File Edit Selection View Go Run ...

EXPLORER

- DIEGO
  - .cache
  - .config
  - .gnupg
  - .local
  - .pki
  - .ssh
  - .vscode
  - cs470
    - des470
    - Lab2
      - Lab2.c
      - Makefile
  - Desktop
  - Documents
  - Downloads
  - Music
  - OS-Lab1
  - Pictures
  - Public
  - snap/firefox
  - 7669
  - 7715
  - common
  - current
  - source470
- OUTLINE
- TIMELINE

cs470 > Lab2 > Makefile

```
1 CC = gcc
2 CFLAGS = -W
3
4 TARGET = Lab2
5 SRC = Lab2.c Makefile
6
7 all:$(TARGET)
8
9 $(TARGET):
10 $(CC) $
11
12 clean:
13 rm -f $
```

diego@codebind: ~/cs470/Lab2

```
diego@codebind:~$ cd cs470/Lab2
diego@codebind:~/cs470/Lab2$ ls
Lab2 Lab2.c Makefile
diego@codebind:~/cs470/Lab2$ make
gcc -Wall -Wextra Lab2.c -o Lab2
diego@codebind:~/cs470/Lab2$ ls
Lab2 Lab2.c Makefile
diego@codebind:~/cs470/Lab2$ ./Lab2
Parent PID: 10915
Child 3 | PID=10919 | Command=whoami
Child 4 | PID=10920 | Command=uname -a
Child 2 | PID=10918 | Command=pwd
Child 0 | PID=10916 | Command=ls -l
Child 6 | PID=10922 | Command=echo "Hello Diego Trevino"
Child 7 | PID=10923 | Command=uptime
Hello Diego Trevino
Linux codebind 6.8.0-90-generic #91-Ubuntu SMP PREEMPT_DYNAMIC Tue Nov 18 13:53:
54 UTC 2025 aarch64 aarch64 GNU/Linux
Child 1 | PID=10917 | Command=date
Wed Feb 4 07:19:33 AM UTC 2026
Child 5 | PID=10921 | Command=id
Child 8 | PID=10924 | Command=ps aux
Child 10 | PID=10926 | Command=false
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

diego@codebind:~\$

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```

diego@codebind: ~/cs470/Lab2

```
diego 10895 0.0 0.1 8372 5120 pts/1 Ss 07:18 0:00 bash
diego 10915 0.0 0.0 2256 1280 pts/1 S+ 07:19 0:00 ./Lab2
diego 10924 200 0.1 10848 4096 pts/1 R+ 07:19 0:00 ps aux
diego 10925 0.0 0.0 0 0 pts/1 Z+ 07:19 0:00 [true] <defun
diego 10926 0.0 0.0 0 0 pts/1 Z+ 07:19 0:00 [false] <defun
diego 10927 0.0 0.0 0 0 pts/1 Z+ 07:19 0:00 [Lab2] <defun
diego 10928 0.0 0.0 0 0 pts/1 Z+ 07:19 0:00 [Lab2] <defun
diego 10929 0.0 0.0 2256 1024 pts/1 S+ 07:19 0:00 ./Lab2
diego 10930 0.0 0.0 2256 1024 pts/1 S+ 07:19 0:00 ./Lab2
root 10931 0.0 0.3 20712 12032 ? R 07:19 0:00 /usr/bin/pyth
root 10932 0.0 0.3 20712 12032 ? R 07:19 0:00 /usr/bin/pyth

Child 8 (PID=10924) EXITED normally | code=0
Child 9 (PID=10925) EXITED normally | code=0
Child 10 (PID=10926) EXITED normally | code=1
Child 11 (PID=10927) EXITED normally | code=127
Child 12 (PID=10928) EXITED normally | code=127
Child 13 (PID=10929) TERMINATED by signal | signal=6
Child 14 (PID=10930) TERMINATED by signal | signal=6

--- Summary ---
Exit normally with code 0: 10
Exit normally with non-zero code: 3
Terminated by signal: 2

Note: Children are created in a fixed order, but they may finish in a different
order.
diego@codebind:~/cs470/Lab2$
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

diego@codebind:~\$

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diego@codebind: ~/cs470/Lab2

```
total 32
-rwxrwxr-x 1 diego diego 70944 Feb  4 07:19 Lab2
-rw-rw-r-- 1 diego diego 5495 Feb  4 07:08 Lab2.c
-rw-rw-r-- 1 diego diego 155 Feb  4 07:16 Makefile
Child 11 | PID=10927 | Command=not_a_real_cmd_470 (intentional fail)
Child 9 | PID=10925 | Command=true
execvp failed: No such file or directory
all:$(TARGET)
Child 12 | PID=10928 | Command=definitely_fake_cmd_470 (intentional fail)
execvp failed: No such file or directory
Child 13 | PID=10929 | Command=abort() (intentional SIGABRT)
--- Parent waiting in CREATION order (waitpid on stored PIDs) ---
Child 0 (PID=10916) EXITED normally | code=0
Child 1 (PID=10917) EXITED normally | code=0
/home/diego/cs470/Lab2
diego
07:19:33 up 1:47, 1 user, load average: 0.32, 0.30, 0.34
Child 3 (PID=10919) EXITED normally | code=0
Child 4 (PID=10920) EXITED normally | code=0
uid=1000(diego) gid=1000(diego) groups=1000(diego),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),101(lxd)
Child 5 (PID=10921) EXITED normally | code=0
Child 6 (PID=10922) EXITED normally | code=0
Child 7 (PID=10923) EXITED normally | code=0
Child 14 | PID=10930 | Command=abort() (intentional SIGABRT)
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
```

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