TP 8 : Fork and files

1   Ping-pong

We're trying to write a program that reads `0` and `1` from the terminal, and send them as signals to a children process. One first implementation can be found in the `pingpong.c` file. Identify the problems with this implementation and fix them.

2   Listing

Write a program that lists the content of the current directory, printing the owner, group, permission and type of each file.

3   Shell manipulations

The file `film.csv` contains information about many films in *CSV* format, with separator `;`. Find shell one-liners to answer the following questions :
— Sort movies by popularity
— How many films do not have a directory
— The title of the first 15 films without the principal actor by alphabetic order
— Find the 10 directors that directed the most films, with the number of films
— Find how many films with awards each directors directed

4   Password discovery

A compiled binary is given that prompt for a password.
You know that :
— The characters allowed are letters, number, #, $ and %.
— There must be at least one special character.
— The password must have at least 20 characters.
Find the correct password.