Exercice 2

Disclaimer

Every code has been written using what Dr. José Alfredo Alvarez Aldana gives as examples for `shared memory` and `fork`.

What was used

Many choices were offered, but I used `shared memory` with `fork()` because it was easier to understand for me.

Everything could be written in a `main` function, but it was too messy for my own understanding. I created another function called `createSharedMem()` which is actually just the **mapping** of the shared memory.

Since `fork()` has been used, a process ID needs to be created. And the whole code is just going back and forth between the child and parent process.

Running the code

Open the terminal and just run this code normally.

```
gcc -o shared_mem shared_mem.c
./shared_mem
# input your message
# to end the chat, press CTRL + C
```

However, as you might notice, the first iteration or the first message sent is not properly executed.
I do not understand why it was executing like this, I tried to arrange it many times without any success.

```
# What is executed
Parent wrote: Child wrote: hello
Parent read: hello

# What is expecting
Child wrote: hello
Parent read: hello
```

Without taking into account this unexpectly first message, the chat application is working quite fine.