

Exercises

10 – Multi - Tasking

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Exercise 1

Write a C program that moves into the background right after activation, waits for X seconds (executing the program `/bin/sleep` with a call to an `exec *`) where X is the program argument and then prints its pid, the pid of the father and then ends.

Exercise 2

Write a program `fibfork.c` that takes the Fibonacci number n as argument. The program should fork two copies of itself to compute `fib(n - 1)` and `fib(n - 2)`. These child processes will return their values to the parent using the `exit` call, but not print them to the screen, and the parent will retrieve them using the `wait` call. This means that the number of processes created will be roughly equal to the Fibonacci number being calculated, so n should be small.