

Practice Lab 3 – Fork() and Wait() in Linux
Operating Systems Comp Sci 3SH3, Winter 2022
Professor. Neerja Mhaskar

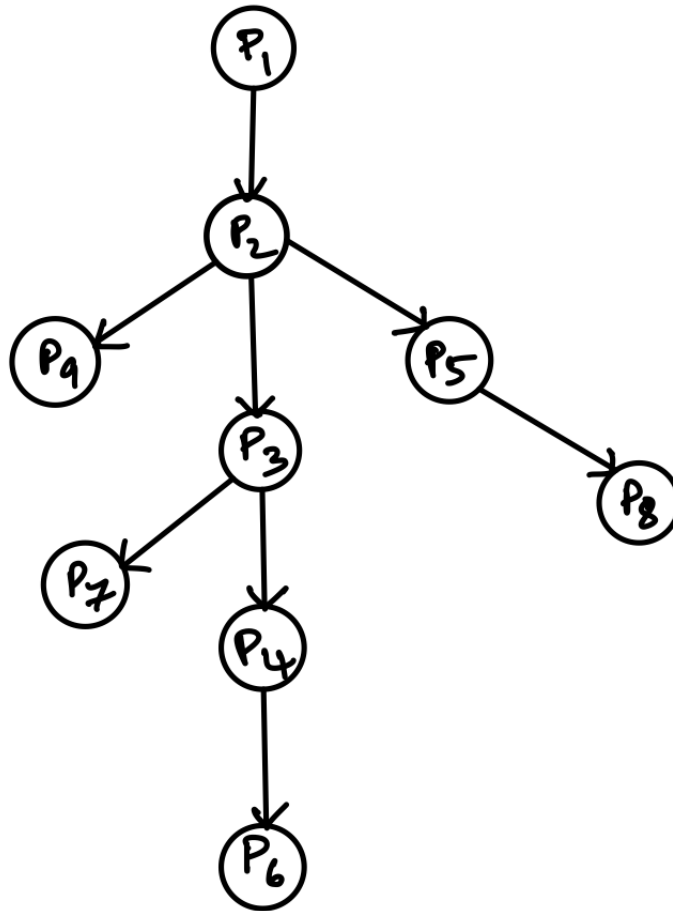
Practice Labs are not mandatory, they are primarily designed to help you with your Lab tests and assignments.

Lab Format: Practice labs will be posted a day before or on the day of the lab on the course website. You can choose to solve it beforehand and come in with your solutions and check the correctness of your solution with your TA.

The TAs will also be available to answer any questions you may have on your assignments.

Outline

Write a C program that corresponds to the below process tree. You are to use the `fork()` system call to create child processes. Additionally, your program should ensure that the parent processes wait for their child processes to complete. As you can see there are a total of **9** processes (including the parent process).



Output:

1. Your program must print the `pids` of all the processes created on the screen.
2. Your program must ensure that duplicate `pids` are not printed.

Sample Output: ./lab3

```
7615
7616
7617
7618
7619
7620
7621
7622
7623
```