

Lab 4
Operating Systems
18/11/2021

1. Write a program to show the difference between `fork()` and `vfork()` system call. Internet can be used to know about `vfork()`.
2. Print the Process tree of the given PID and also print its parent, grand parent PID details until the root PID. Write a C program to take the input as PID and do above task. Do not use the 'pstree' command.
3. Write a program that forks 2 child processes. Child 1 prints a message every 1 sec. Child 2 sleeps for 10 secs, then kills child 1, then sleeps for 10 secs and terminates. The parent waits for both child processes to terminate then exits. Each process should print a 1-line message including its pid before/after each significant action such as sleep, kill, terminate, etc.
4. Explore the `system()` function and write a C program using this function.