

Programming Assignment #02

Due: Thursday, 09/24/2020, by 11:30pm

Write a program that will utilize signal handlers to intercept keyboard interrupts to manage control of a child process. Your main program should fork and exec a new child process to run the “yes” command (use `man yes` to learn more). You should then register signal handlers for both `ctrl-c` and `ctrl-z` in your main program. The `ctrl-z` signal handler should toggle the child yes stop the child process if it is running, or resume the child process if it is stopped, all while keeping the main program running. The `ctrl-c` signal should kill the child process, and then exit the main process. In both signal handlers, add print statements indicating what the program is doing – i.e. “`ctrl-z` caught, stopping child process”. Your main program should sit in an infinite loop once the setup has been completed. It should only exit when the user hits `ctrl-c`, after cleaning up the child process.

Name your source code as “YourLastName+YourFirstNameInitial_YourLastName+YourFirstNameInitial_PA1”. For example, if Xiang Sun and Liangkun Yu work together as a group, the name of your submitted file is “SunX_YuL_PA02.” Then, submit the files into PA02. We will compile and test your program from there.