

COMP 8567
Fall 2022
Section 1
Lab 04- Signals
Marks: 25
4:30pm to 5:25 pm

PART A: Write a C program to create a parent and a child process that run in an infinite *for* loop (with the message “**Child Process is running/ Parent Process is running**” with an interval of 1 sec and implement a **handler for SIGINT (CTR+C)**. The handler must print the signal number and also the PID of the child/parent process, sleep for 3 seconds and then return control back to the program. Observe which of the process/s receive the CTRL+C signal (Upload the program as inclass4a.c)

PART B: Write a C program where in a process is always in a state of pause with the following exception: The process emerges from its paused state upon the receipt of two back-to back **SIGINT** (CTR+C) signals, Prints “Received two CTR+C signals” and then returns immediately to the paused state. This must be implemented using a handler within a single process (no need to fork).

Note: The time interval between the two back-to-back signals cannot be more than 5 seconds and violations must be communicated with a suitable message. (Upload the program as inclass4b.c)