

**COMP 8567**  
**Winter 2023**  
**Lab 06- Signals-Part 2**  
**Marks: 25**

- Write a C program with three consecutive `fork()` statements such that each forked process is in a state of pause after being forked. The main process should also be in a state of pause after all the descendent processes are forked. Using the system call **`setpgid()`**, ensure that **only the grandchildren** of the main process are terminated upon entering CTR-C. Each of the terminated grandchild process **must print its PID and PPID along with a short message stating that it has been terminated.**
- After the grandchildren have been terminated, the main program and its direct descendants must take turns every 4 seconds to print the statement "This is from process (process id)" (4 times -with a one second interval). **There should be no interleaving of print statements from different processes, and they must be printed consecutively from each process in the circular order listed below. Note:** you must implement this using **SIGTOP** and **SIGCONT**

**main -> child1->child2->child3->main**

**Submission:**  
Upload lab6.c