**Individual assignment #3**

**Module 1**

**Cyber 262**

Please write a Python program to analyze the given log files and print to console the following outputs:

* Output A: The first log file contains two particular kinds of events: stat events and clone events, respectively. Please output all the following two-event sequences contained in the first log file.
  + Inside each such two-event sequence:
    - The first event must be a stat event;
    - The second event must be a clone event;
    - The first event must precede the second event;
    - The two events do not need to be neighbors;
    - Both events must have happened to the same pid (process id);
    - Between these two events, there isn’t any other stat or clone event which has happened to the aforementioned pid;
    - Please output the whole log entry for each of the two events;
    - Please output the timestamp of each of the two events;
* Output B: The second log file contains two particular kinds of events: stat events and clone events, respectively. Please do the same thing described in Output A against the second log file.
* Output C: One of the two log files contains three particular kinds of events: open events, getdents events, and close events. Please find the log file that contains all the three kinds of events, and output all the following three-event sequences:
  + Inside each such three-event sequence:
    - The first event must be an open event;
    - The second event must be a getdents event;
    - The third event must be a close event;
    - The first event must precede the second event, and the second event must precede the third event;
    - The three events do not need to be neighbors;
    - All of the three events must have happened to the same pid (process id);
    - The directory being operated on by all of the three events must be the same directory;
  + Inside each such three-event sequence:
    - There isn’t any other open, getdents, or close event which (a) has happened to the aforementioned pid; and (b) has operated on the aforementioned directory;
    - Please output the whole log entry for each of the three events;
    - Please output the timestamp of each of the three events;

**What to submit**:

* Your Python program(s)
* The outputs you get (in a txt file)

Please put all these items in a folder and compress the folder into a single ZIP archive file. Include your first and last names in the file name of the ZIP archive.