

**SYSC4001 - Assignment 3 Part 2c Report**

**Zaineb Ben Hmida - 101302936**

**Sohaila Haroun - 101297624**

[https://github.com/zaineb-bh/SYSC4001\\_A3P2.git](https://github.com/zaineb-bh/SYSC4001_A3P2.git)

Part 2c:

A deadlock occurs if processes are waiting for each other to release a required resource to continue running.

A livelock occurs when processes are running but continuously alter their state and react in response to another process, and therefore make no progress.

When analysing Part a's and Part b's output, we can determine that no deadlocks or livelocks occur as all TAs execute without any indefinite waiting, and progress is always being made.

Execution order of processes:

The process executes both concurrently and sequentially, where marking executes sequentially and reading the rubric executes concurrently. Each TA picks an exam and marks questions from the exam. The rubric is read by all TAs at the same time, concurrently, but the corrections are made separately, with only one TA correcting and writing to the rubric one at a time, concurrently. Different TAs mark different exams or questions at the same time to ensure they are always busy and to avoid interruptions to their marking, but only one TA can write to the rubric at a time. Once all questions from one exam have been marked, a new exam is loaded, and the process repeats.