

There was no instance of deadlock or livelock found while testing Part B.

1. All TA processes are started.
2. A TA is given the opportunity to review the rubric.
3. If a TA decides to review the rubric it will wait for a brief period of time and then lock the rubric.
4. The rubric is then unlocked after the TA writes the changes to the rubric.txt file.
5. After the rubric is updated or the TA decides not to review the rubric the TA can move on to marking.
6. The TA then locks the exam.
7. The TA then finds an unmarked question and updates the question to now be marked. After this the TA will wait for a brief period of time and then unlocks the exam.
8. If an unmarked question is found, the TA updates the status to 'marked', releases the semaphore (unlocks) to allow other TAs to access the data, and then sleeps to simulate the time taken to grade.

This cycle continues till the student with student ID 9999 is loaded, at which point the TAs detect the termination signal and exit.