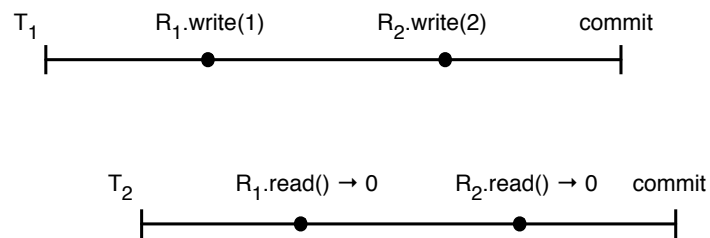


Concurrent Algorithms 2010: Exercise 9

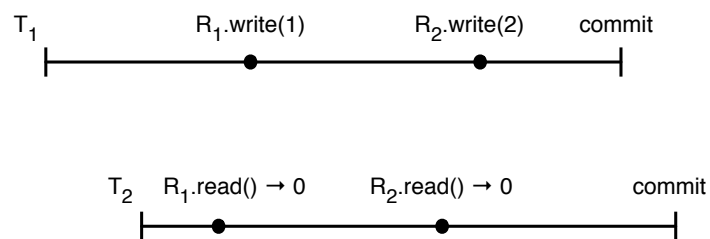
1 Problem 1

Each of the following executions represents an interleaving of transactions executed by a *Transactional Memory* object. For each execution:

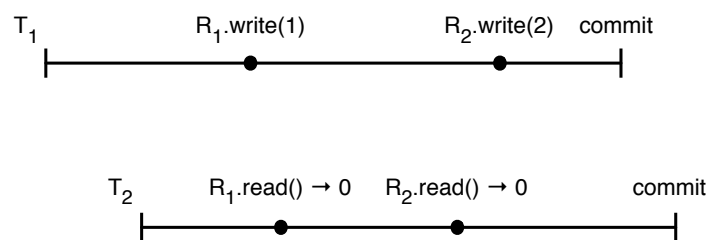
- Specify whether it is *opaque* or not.
- If it is not, suggest a modification to make it *opaque*.
- Specify an equivalent serial execution of transactions.



(a)

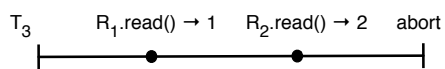
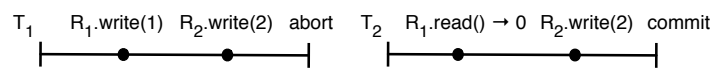


(b)

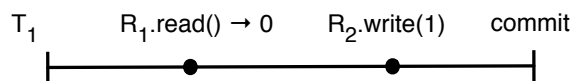


(c)

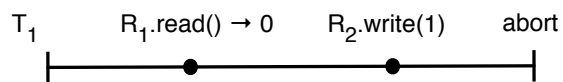
Figure 1: Transactional executions (part 1)



(a)



(b)



(c)

Figure 2: Transactional executions (part 2)