CS 162 Section 9

True/False:
1. Serial schedules are necessary to preserve ACID transaction semantics

Short Answer:
1. What does ACID stand for? Explain each of them.

2. What are some elements you might want to lock in a database?

3. What are types of possible conflicts in an execution of multiple transactions?

4. What are the requirements for two transaction operations to conflict?

5. Two schedules are conflict equivalent iff:
Long Answer:
1. Consider the following two transactions and schedule (time goes from left to right). Is this schedule conflict-serializable? Explain why or why not.

   T2:     R2[A]  R2[B]

2. Consider a database with objects X and Y and assume that there are two transactions T1 and T2. T1 first reads X and Y and then writes X and Y. T2 reads and writes X then reads and writes Y. Give an example schedule that is not serializable. Explain why your schedule is not serializable.