## 10\_Transaction\_Schedule\_Properties

Due Mar 17 at 9pm Points 5 Questions 5 Time Limit None Allowed Attempts 3

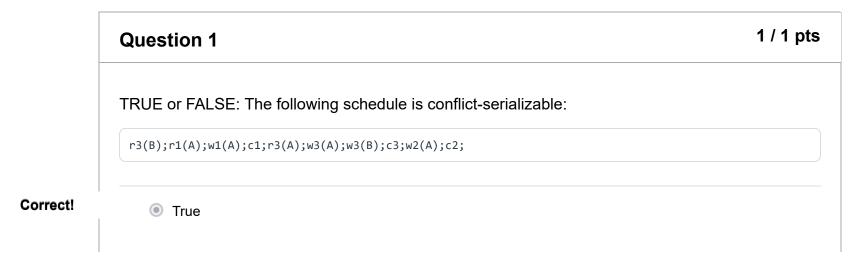
## **Attempt History**

	Attempt	Time	Score
KEPT	Attempt 3	less than 1 minute	5 out of 5
LATEST	Attempt 3	less than 1 minute	5 out of 5
	Attempt 2	less than 1 minute	2 out of 5
	Attempt 1	5 minutes	2 out of 5

Score for this attempt: 5 out of 5

Submitted Mar 18 at 11:49am

This attempt took less than 1 minute.



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False 1 / 1 pts **Question 2** TRUE or FALSE: The following schedule is non-recoverable and conflict-serializable: r3(B);r1(A);w1(A);r3(A);w3(A);w3(B);c3;c1;w2(A);c2; True

Correct!

False

A non-recoverable schedule occurs when a transaction is allowed to commit its work before a transaction that it read a data value from commits. In this case, T3 reads A after T1 writes A and T3 commits before the write of w1(A) is committed. This is a non-recoverable action. Note that the transaction read from (T1) does not have to abort for the schedule to be considered non-recoverable!

1 / 1 pts **Question 3** 

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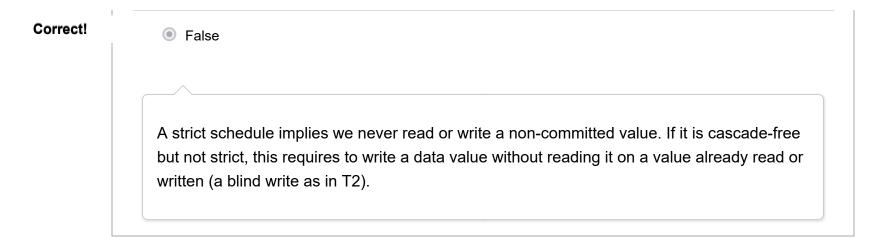
	r1(A);w1(A);r3(B);r3(A);w3(A);w3(B);c1;c3;w2(A);c2;
	O True
	False
	A cascade-free schedule occurs when cascading rollback is prevented. We do not allow the read an uncommitted data item written by another transaction. The schedule is recoverable because T1 was committed before T3. However, even though T3 committed it is still not
	cascade-free as a failure may occur before the commit for T1 is logged, which would require

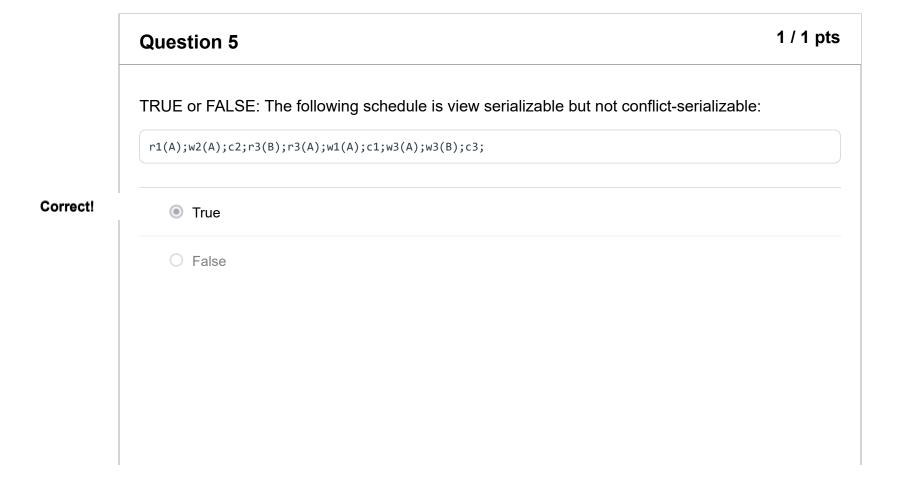
TRUE or FALSE: The following schedule is strict:

r1(A);w1(A);w2(A);c2;c1;r3(B);r3(A);w3(A);w3(B);c3;

True

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A schedule that is view serializable but not conflict serializable is only possible if there exists a blind write as in T2. In this case, the schedule is not conflict serializable because the w2(A) conflicts with r1(A) and w1(A). However, it is view serializable to the serial schedule T1, T2, T3 because:

- 1. T1 is the first to read A in both schedules and T3 is first to read B in both schedules.
- 2. T3 reads A from T2 in both schedules.
- 3. T3 is last to write both A and B in both schedules.

Quiz Score: 5 out of 5