10_Transactions

Due Mar 11 at 3pm **Points** 9 **Questions** 9 **Time Limit** None **Allowed Attempts** 7

Take the Quiz Again

Attempt History

	Attempt	Time	Score
KEPT	Attempt 3	1 minute	9 out of 9
LATEST	Attempt 3	1 minute	9 out of 9
	Attempt 2	less than 1 minute	7 out of 9
	Attempt 1	2 minutes	6 out of 9

ⓘ Answers will be shown after your last attempt

Score for this attempt: **9** out of 9
Submitted Mar 18 at 8:19am
This attempt took 1 minute.

Question 1 — 1 / 1 pts

Two transactions running at the same time can see each other's updates. What ACID property is violated?

- atomicity
- consistency
- isolation
- durability
- none of them

Question 2

1 / 1 pts

A company stores a customer's address in the database. The customer moves and does not tell the company to update its database. What ACID property is violated?

- atomicity
- consistency
- isolation
- durability
- none of them

Even though the database is not consistent with the real-world, it is internally consistent.

Question 3

1 / 1 pts

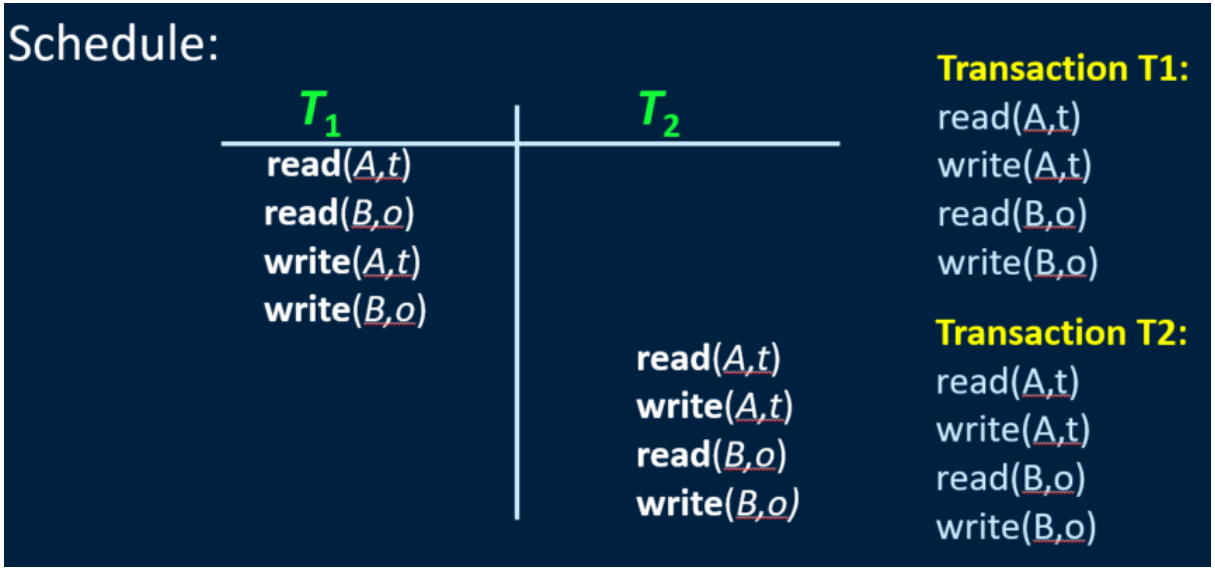
Is it possible for a transaction to be in the aborted and committed states at different times during its lifetime?

- ○ yes
- ◉ no

Question 4

1 / 1 pts

Is the schedule valid for the two transactions below?



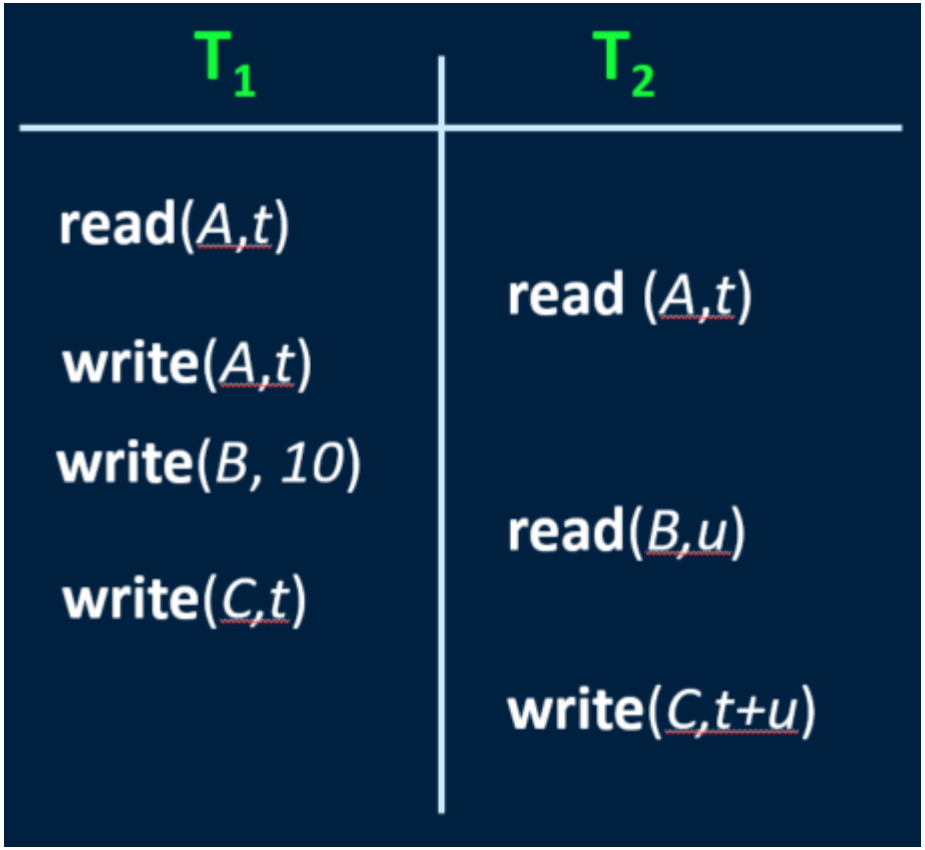
- yes
- no (selected)

Cannot reorder operations within a transaction in a schedule.

Question 5

1 / 1 pts

What consistency issue does this schedule have?



- lost update
- dirty read
- incorrect summary
- none
- more than one

Lost update as T1 write on C is lost.

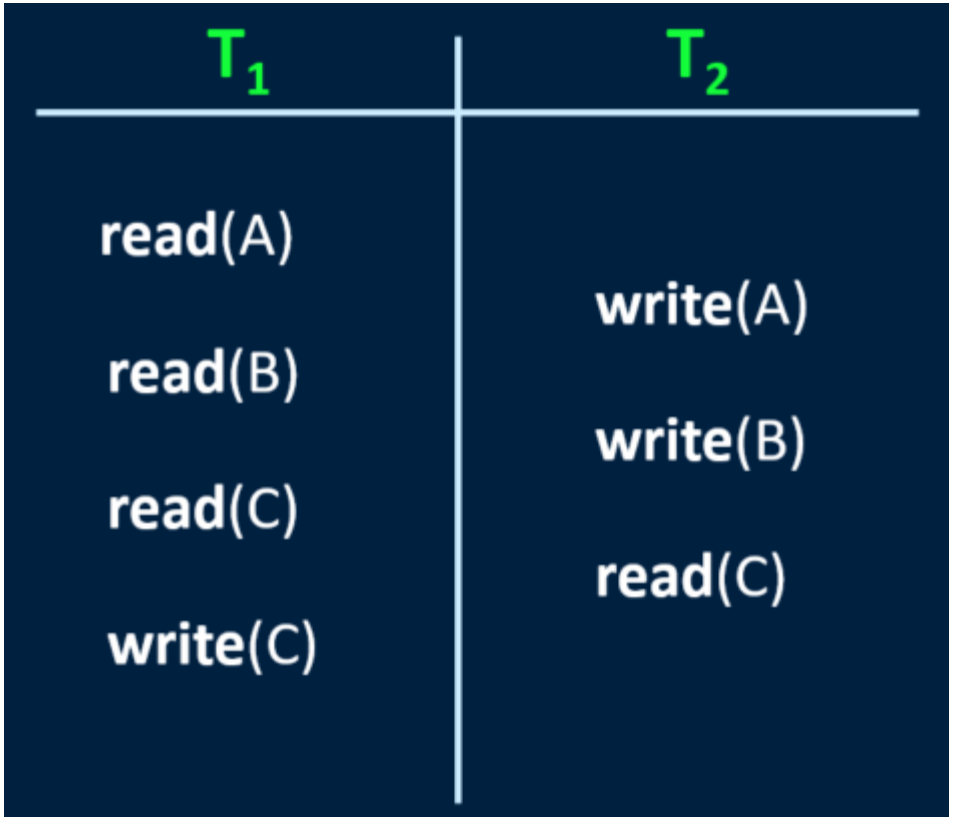
Incorrect summary as T2 computes sum with old value of A but updated valued of B from T1.

Dirty read (even though T1 did not abort) as T2 read a value that was not committed.

Question 6

1 / 1 pts

Is this schedule conflict serializable?



- yes
- no

Conflict on C. Otherwise could re-organize so T2 comes after T1.

Question 7

1 / 1 pts

How many of the following statements are true?

- i) Every serial schedule is a strict schedule.
- ii) A serializable schedule may not be recoverable.
- iii) Every cascade-free schedule is also a strict schedule.
- iv) There are more recoverable schedules than cascade-free schedules.

- 0
- 1
- 2
- 3 (selected)

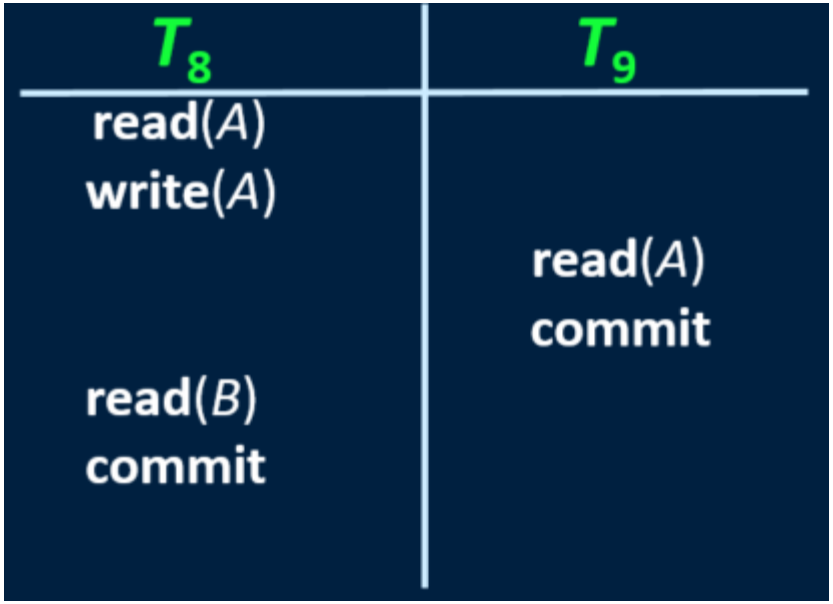
True statements: I, ii, and iv

- 4

Question 8

1 / 1 pts

Is this schedule recoverable?



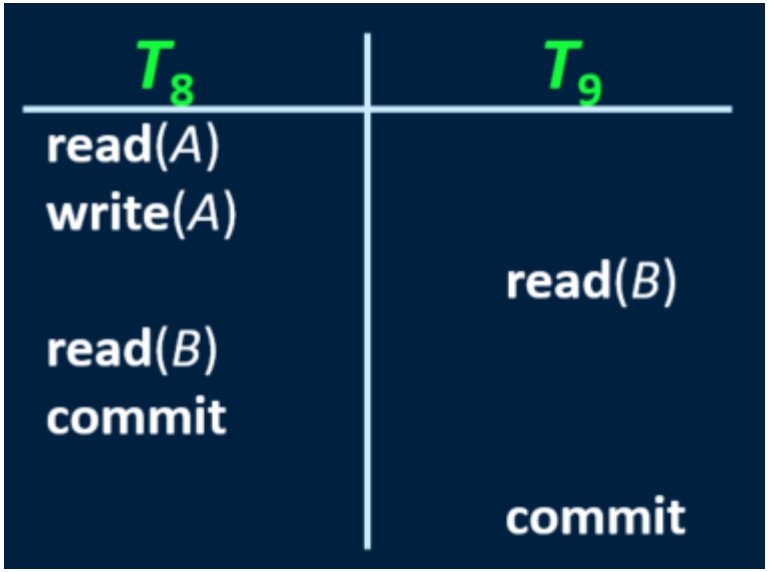
- yes
- no

T9 reads from T8 and commits before it.

Question 9

1 / 1 pts

Is this schedule cascade-free?



- (●) yes

  T9 reads B which is a committed value. Note that it would not be cascade-free if T9 did read(A).

- ( ) no

Quiz Score: **9** out of 9