Reading Homework 16 (Due Wednesday May 9, 3:20PM)

Due May 9, 2018 at 3:25pm **Points** 12 **Questions** 12 **Time Limit** None

Instructions

Assigned Reading: First 3 pages of 14.6 (you can stop reading when that section starts talking about precedence graphs), 14.8 (including blue box), 14.9.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	3 minutes	12 out of 12

Score for this quiz: **12** out of 12
Submitted May 9, 2018 at 3:01pm
This attempt took 3 minutes.

Question 1

1 / 1 pts

How many serial schedules is the schedule below conflict equivalent to?

T1	T2
READ(A)	
	READ(A)
	A := A + 5
	WRITE(A)
	commit
B:= A	
WRITE(B)	
commit	

0

Correct!

- (•) 1
- ( ) 2
- ( ) 3

Question 2

1 / 1 pts

How many serial schedules is the schedule below equivalent to? (The previous question asked about conflict equivalence, this question just asks about regular equivalence which you looked at in the reading for Monday --- Chapter 14.5).

T1	T2
READ(A)	
	READ(A)
	A := A + 5
	WRITE(A)
	commit
B:= A	
WRITE(B)	
commit	

- ( ) 0

Correct!

- (•) 1
- ( ) 2
- ( ) 3

Question 3

1 / 1 pts

How many serial schedules is the schedule below conflict equivalent to?

T1	T2
READ(A)	
A = A + 5;	
WRITE(A)	
	READ(A)
	A:= A + 1;
	WRITE(A)
	commit
READ(B)	
B:=B - 2;	
WRITE(B)	
commit	

- 0
- 1

Correct!

- 2
- 3

Question 4

1 / 1 pts

How many serial schedules is the schedule below equivalent to? (The previous question asked about conflict equivalence, this question just asks about regular equivalence which you looked at in the reading for Monday --- Chapter 14.5).

T1	T2
READ(A)	
A = A + 5;	
WRITE(A)	
	READ(A)
	A:= A + 1;
	WRITE(A)
	commit
READ(B)	
B:=B - 2;	
WRITE(B)	
commit	

- 0
- 1

Correct!

- 2
- 3

Question 5

1 / 1 pts

Weaker levels of consistency are used to achieve higher concurrency than serializability would allow.

Correct!

- True
- False

Question 6

1 / 1 pts

Most databases run, by default, on the repeatable read isolation level

- True
- Correct! False

Question 7

1 / 1 pts

All isolation levels disallow dirty reads.

- True
- Correct! False

Question 8

1 / 1 pts

For the query:

SELECT * FROM table WHERE att1 > 8;

The query optimizer decides to use a sequential scan to perform the selection predicate for this query.

True or false: If we were to run this query at the read committed isolation level, it is guaranteed that we would get the same results as the same query run at the repeatable read isolation level (assume everything else stays the same as far as execution of the query except the isolation level has changed).

- Correct! True
- False

Question 9

1 / 1 pts

For the query:

SELECT * FROM table1 natural join table2;

The query optimizer decides to use a nested loops join for this query.

True or false: If we were to run this query at the repeatable read isolation level, it is guaranteed that we would get the same results as the same query run at the serializable isolation level (assume everything else stays the same as far as execution of the query except the isolation level has changed).

- True
- False

Correct!

Question 10

1 / 1 pts

In the seat selection example in the blue box at the end of 14.8 of your textbook, the need (described in the last paragraph) to separate user interaction from the transaction itself would go away if these transactions were running at the read committed isolation level (instead of serializable), and the application would still run correctly.

- True
- False

Correct!

Question 11

1 / 1 pts

If transaction A has a lock on a record in a table, it is impossible for transaction B to read that record until A releases the lock.

- True
- False

Correct!

- It depends on the type of lock A has on that record.

Question 12

1 / 1 pts

It is so rare for a database running at the snapshot isolation level to allow a nonserializable schedule that some database systems even call snapshot isolation "serializable".

Correct!

- True
- False

Quiz Score: **12** out of 12