quiz on concurrency control 1
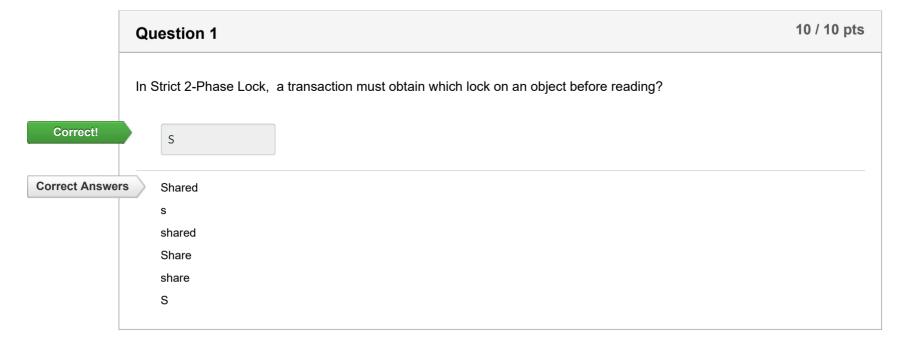
Attempt History

	Attempt	Time	Score
KEPT	Attempt 2	1 minute	100 out of 100
LATEST	Attempt 2	1 minute	100 out of 100
	Attempt 1	22 minutes	80 out of 100

Score for this attempt: **100** out of 100
Submitted Apr 21 at 5:34pm
This attempt took 1 minute.

Question 1   10 / 10 pts

In Strict 2-Phase Lock, a transaction must obtain which lock on an object before reading?

Correct!

> S

Correct Answers

Shared

s

shared

Share

share

S

Question 2

10 / 10 pts

In strict 2-phase lock, if a transaction's request is not granted, then

- ○ It requests again

Correct! → ● It is suspended

- ○ It is aborted immidiately

- ○ It continues anyway

Question 3

10 / 10 pts

Strict 2PL will produce strict schedule

Correct! → ● True

- ○ False

Question 4

10 / 10 pts

T1	T2
S(A)	
R(A)	
	S(A)

	R(A)
X(A)	
W(A)	

Is this possible as a result of Strict 2PL?

- ○ True

- ⦿ False

Question 5

T1	T2	T3	T4
S(A)			
R(A)			
	X(B)		
	W(B)		
		S(A)	
		R(A)	
			S(B)
X(A)			
		X(A)	
	S(A)		
	R(A)		
	X(A)		

Suppose these are the current transactions with Strict 2PL .

Is there a deadlock?

⦿ True

○ False

Question 6

10 / 10 pts

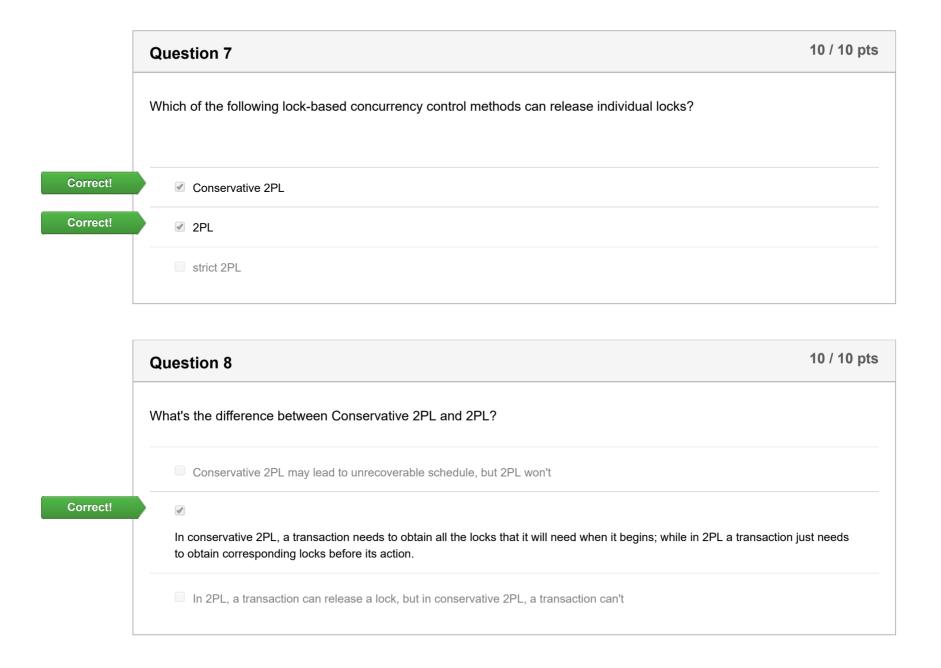| T1	T2	T3	T4
S(A)			
R(A)			
	X(B)		
	W(B)		
		S(A)	
		R(A)	
			S(B)
X(A)			
		X(A)	
	S(A)		
	R(A)		
	commit		

Suppose these are the current transactions with Strict 2PL .

Is there a deadlock?

⦿ True

○ False

Question 7

10 / 10 pts

Which of the following lock-based concurrency control methods can release individual locks?

Correct! ☑ Conservative 2PL

Correct! ☑ 2PL

☐ strict 2PL

Question 8

10 / 10 pts

What's the difference between Conservative 2PL and 2PL?

☐ Conservative 2PL may lead to unrecoverable schedule, but 2PL won't

Correct! ☑

In conservative 2PL, a transaction needs to obtain all the locks that it will need when it begins; while in 2PL a transaction just needs to obtain corresponding locks before its action.

☐ In 2PL, a transaction can release a lock, but in conservative 2PL, a transaction can't

Question 9

10 / 10 pts

which lock-based concurrency control method will result in the following phenomenon.

For a transaction, the number of locks always increases until its commit or abort.

___

☐ 2PL

___

☐ conservative 2PL

___

Correct! ☑ strict 2PL

___

Question 10

10 / 10 pts

which lock-based concurrency control method will result in the following phenomenon.

For a transaction, the number of locks always decreases until its commit or abort.

___

Correct! ☑ conservative 2PL

___

☐ strict 2PL

___

☐ 2PL

___

Quiz Score: **100** out of 100