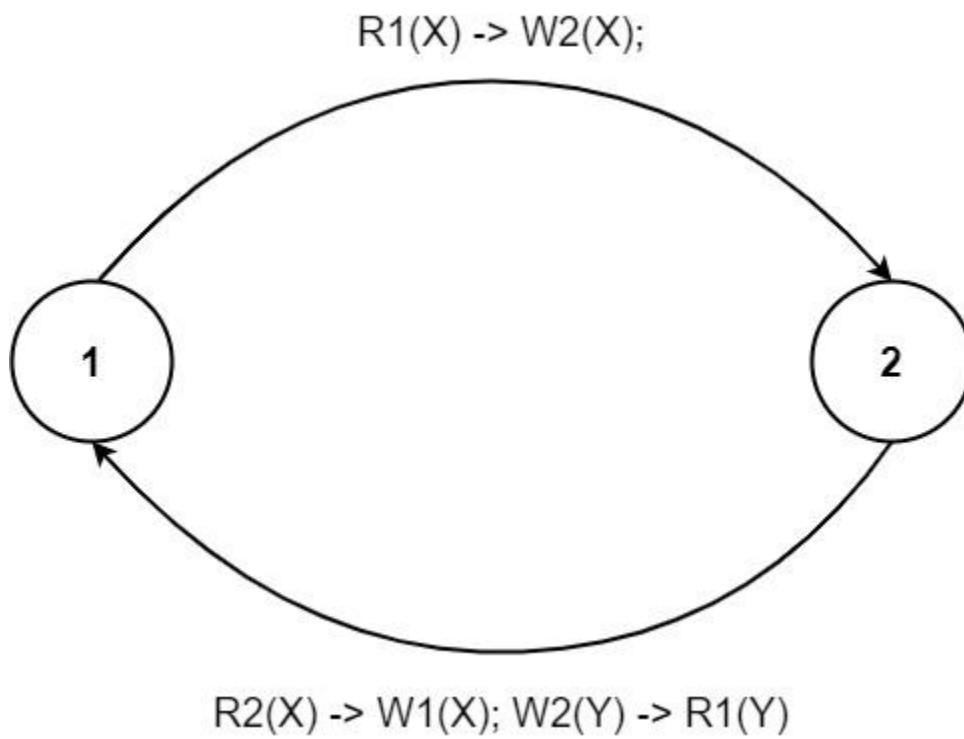


A)

T1	T2
R(X)	
	R(X)
	R(Y)
	W(Y)
R(Y)	
W(X)	
	R(X)
	R(Y)
	W(X)
	R(Z)
	W(Z)



Since the graph contains a cycle, this schedule is NOT conflict-serializable.

B)

The database should not treat a single SQL statement like this as a transaction. One reason is that a transaction always follows ACID properties. That "A" stands for Atomic, meaning that either the statement works in its entirety or it doesn't – and while the statement is being performed, no other queries can be done on the data affected by that query. BEGIN TRANSACTION / COMMIT "extends" this locking functionality to the work done by multiple queries, but it adds nothing to single queries. So creating transactions for a single query can unnecessarily create burdens for the server and developers.