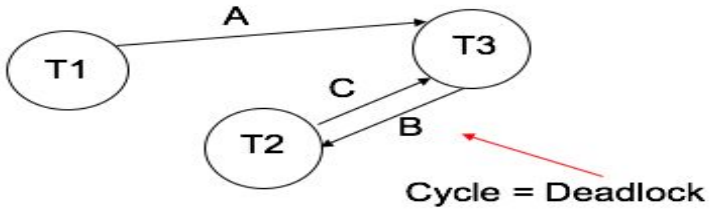
Lock Example A – what happens?

Time	Tx	Access	A	B	C
0	(T1)	READ A			
1	(T2)	READ B			
2	(T3)	READ A			
3	(T1)	UPDATE A			
4	(T3)	READ C			
5	(T2)	READ C			
6	(T2)	UPDATE B			
7	(T2)	READ A			
8	(T2)	UPDATE C			
9	(T3)	READ B			

Wait-For-Graph (WFG) Example A

TIME	TX	ACCESS	A	B	C
0	(T1)	READ A	S(T1)		
1	(T2)	READ B		S(T2)	
2	(T3)	READ A	S(T3)		
3	(T1)	UPDATE A	T1 Wait for T3		
4	(T3)	READ C			S(T3)
5	(T2)	READ C			S(T2)
6	(T2)	UPDATE B		X(T2)	
7	(T2)	READ A	S(T2)		
8	(T2)	UPDATE C			T2 Wait for T3
9	(T3)	READ B		T3 Wait for T2	



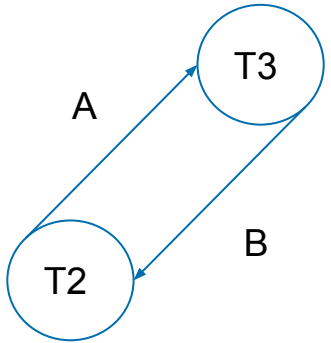
Deadlock exists

Lock Example B – what happens?

TIME	TRANS	ACTION	A	B	C
0	T1	READ A			
1	T1	UPDATE A			
2	T2	READ B			
3	T3	READ A			
4	T1	COMMIT			
5	T3	READ C			
6	T2	UPDATE A			
7	T3	READ B			
8	T3	UPDATE C			
9	T3	UPDATE B			

Wait-For-Graph (WFG) Example B

TIME	TRANS	ACTION	A	B	C
0	T1	READ A	S(T1)		
1	T1	UPDATE A	X(T1)		
2	T2	READ B		S(T2)	
3	T3	READ A	T3 Wait T1		
4	T1	COMMIT	S(T3)		
5	T3	READ C			S(T3)
6	T2	UPDATE A	T2 Wait T3		
7	T3	READ B		S(T3)	
8	T3	UPDATE C			X(T3)
9	T3	UPDATE B		T3 Wait T2	



Deadlock exists