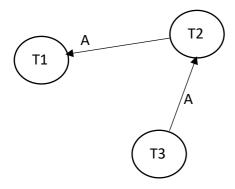
## **Exercise Wait Graph**

## Exercise 1:

T1	T2	Т3
R(A)		
	R(B)	
	W(A)	
	Commit	
W(A)		
Commit		
		W(A)
		Commit

2PL

T1	T2	T3	
S(A)			
R(A)			
	S(B)		
	R(B)		
	Waitlock(A)		
X(A)			
W(A)			
Commit			
Unlock (A)	X(A)	Waitlock(A)	
	W(A)		
	Commit		
	Unlock(B)		
	Unlock(A)	X(A)	
		W(A)	
		Commit	
		Unlock(A)	



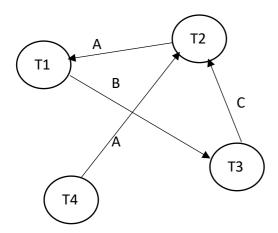
No Deadlock

## Exercise 2:

T1	T2	T3	T4
R(A)			
	R(c)		
		R(B)	
			R(D)
	W(A)		
		W(C)	
			W(A)
W(B)			
Commit			
	Commit		
		Commit	
			Commit

## 2PL

T1	T2	T3	T4
S(A)			
R(A)			
	S(C)		
	R(C)		
		S(B)	
		R(B)	
			S(D)
			R(D)
	Waitlock(A)		
		)	
		Waitlock(C)	
			Waitlock(A)
Waitlock(B)			



There is a deadlock in the graph between the transactions T1, T2 and T3. Solution: Aborting T3  $\,$