Student ID:33429472
Student Name:Ziqi Pei
Unit Code:FIT9132
Applied Class No:A12

Comments for your marker:

(a)

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

- Does a deadlock exist in this transaction sequence?

Correct

- Explain why you came to this conclusion.

Summarize, the deadlock arises due to the circular wait between T2, T3, and T1, where T2 is waiting for T3 to release the locks it holds, T3 is waiting for T1 to release the lock it holds, and T1 has already rolled back but is waiting for T2 and T3 to release their locks.

(b)

TRL ID	TRX NUM	PREV PTR	NEXT PTR	OPERATION	TABLE	ROW ID	ATTRIBUTE	BEFORE VALUE	AFTER VALUE
1	1	NULL	2	START	**** START TRABSACTION				
2	1	1	3	UPDATE	PRODUCT	ABC	PROD_QOH	77	76
3	1	2	4	UPDATE	PART	A	PART_QOH	53	52
4	1	3	5	UPDATE	PART	B	PART_QOH	10	9
5	1	4	6	UPDATE	PART	C	PART_QOH	21	20
6	1	5	NULL	COMMIT	****END OF TRANSACTION				

no gaps in TRL_ID