Assignment 4 – Concurrency Control

B561 - Fall 2011 Due: 10pm Nov. 29 Total score: 40 points

Please note that as final exam date is close, to ensure that we can post and discuss solutions with students, there will be no delayed submission allowed for this assignment. The oncourse dropbox will be closed at 10pm, Nov 29.

Consider the following sequence of data access requires to two tables A and B from a set of transactions X1, X2 and X3. The intervals between the requests in each transaction reflect the time laps between these requests if the transaction is the only transaction in the system.

	t1	t2	t3	t4	t5	t6	t7	t8	t9	t10	t11	t12	t13
X1	R(A)					R(A)			R(B)	W(B)	Commit		
X2		R(B)		R(A)			W(B)					W(B)	Commit
X3					R(A)						W(A)	Commit	

Now, the three transactions concur, with X1 starting at t1, X2 starting at t2 and X3 starting at t5. Please similar the lock-manager in handling these transactions.