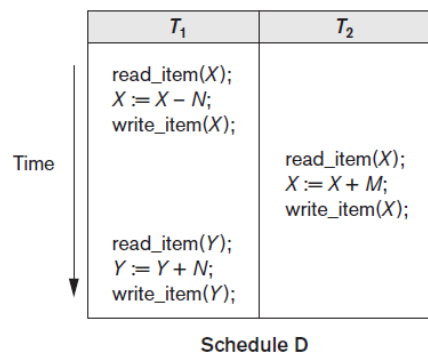
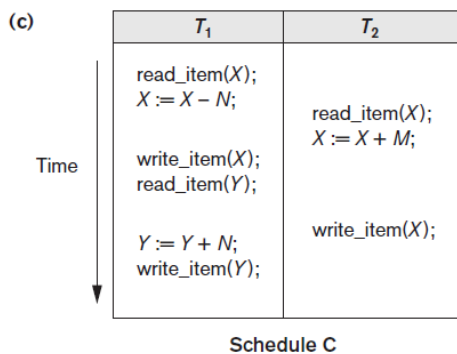
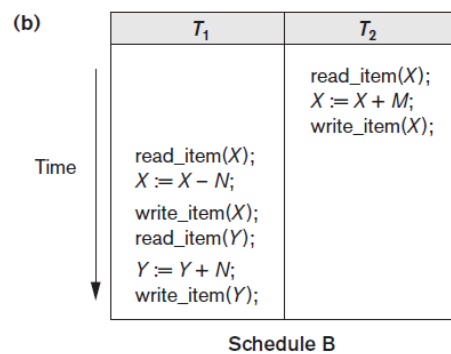
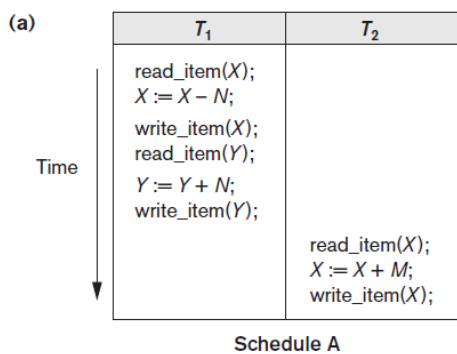


Chapter 20. Transaction

1. Does the schedule below suffer from the lost update anomaly? Justify your answer for A=100, B=200, temp=3.

T_1	T_2
read(A) $A := A - 50$ write(A) read(B) $B := B + 50$ write(B) commit	read(A) $temp := A * 0.1$ $A := A - temp$ write(A) read(B) $B := B + temp$ write(B) commit

2. Consider the two serial schedules A and B. Discuss if schedules C and D are serializable to schedules A or B. Consider $X=90$, $Y=90$, $N=3$, $M=2$. Can you propose another serializable schedule. Use also an example illustrating your answer.



3. Use any of the schedules above to explain the (a) Atomicity and (b) Isolation properties of Transactions in the context of ACID properties. Show also, if applicable, a case where such properties are not met!