LOST UPDATE PROBLEM

- TWO TRANSACTIONS ACCESS THE SAME DATABASE, T_1, T_2

T_1		T_2	
read_item(X)	X=100		
X := X-N	X=100-30		
		read_item(X)	X=100
		X := X+M	X=100+25 =125
write_item(X)	X=70		
read_item(Y)	Y=360		
		write_item(X)	X=125
		X IS OVERWRITTEN	
Y := Y+N	Y=360+10		
write_item(Y)	Y=370		

This change is lost!

LOST UPDATE!

TEMPORARY UPDATE PROBLEM

- ONE TRANSACTION UPDATES THE DATABASE BUT IT FAILS FOR SOME REASON, T_1
- ANOTHER TRANSACTION READS THE UPDATED VALUE BEFORE IT IS CHANGED BACK TO ITS ORIGINAL VALUE, T_2

T_1	T_2
read_item(X)	X = 100	
X := X - N	X = 100 - 30	
write_item(X)	X = 70	
	read_item(X)	X = 70
	X := X + M	X = 70 + 5
	write_item(X)	X = 75
read_item(Y)		
SOMETHING FAILED		
undo_the_changes	X = 100	

this was a DIRTY READ!