

Assignment 6

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- **20.14:**
 - The condition above would change the final outcome in this scenario but only if X exceeds 90 after M (2) is added to X. Otherwise nothing would change about the final outcome and the lost update and temporary update problem would still exist. If it is possible that X is already over 90 by the time it gets to T^1 or T^2 then the outcome would not obey the implied consistency rule but if that is not possible then this would obey the implied consistency rule. If the addition of M to X caused it to exceed 90 then it would not be written and as long as N is a positive number you cannot subtract N from X to increase its value to over 90.
- **20.15:**
 - By adding the check so that Y does not exceed 90 in T^1 on top of the check to see if X exceeds 90 in T^2 would change the outcome slightly but overall the final outcome would be the same regarding X and the problems that occur with X. What would change with this check for Y is if adding N seats to Y causes it to exceed 90 then it will not transfer the N seats to Y. For example if X was at 89 seats and Y was also at 89. Then when N (2) seats are transferred to Y the transfer would not occur because Y + N would exceed 90. The outcome would obey the implied consistency rule as long as Y is not greater than 90 before the transaction occurs. N is added to Y and it is then checked to see if it exceeds 90 which if it does after the transfer, then the transfer to Y is not written and the transaction exits. If Y does not exceed 90 then the transfer is fine and the new value for Y is written which would be obeying the implied consistency rule.