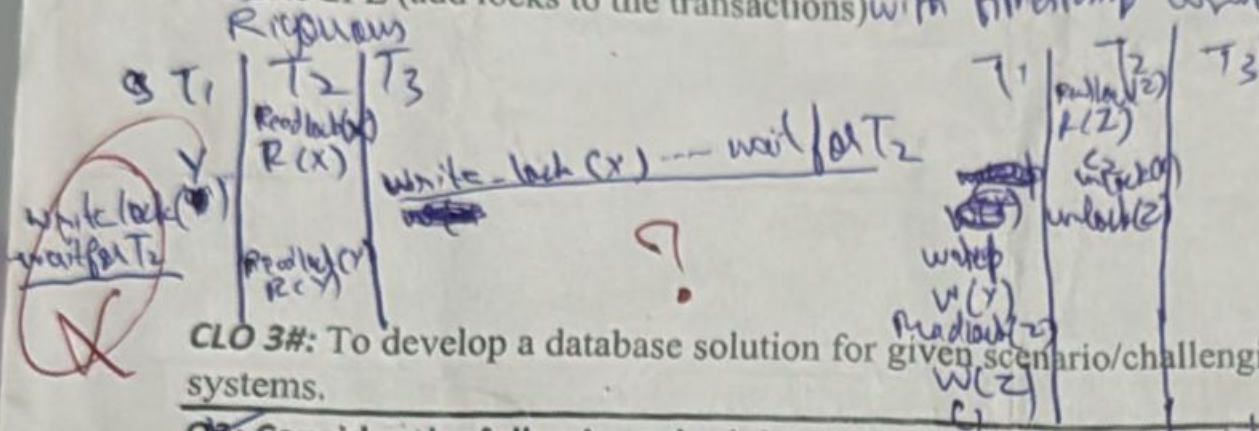


CLO 3#: To develop a database solution for given scenario/challenging problem in the domain of database systems.

Q2: For the schedule S: $r_2(X)$, $w_3(X)$, c_3 , $w_1(Y)$, $r_2(Y)$, $r_2(Z)$, c_2 , $r_1(Z)$, c_1 . Show that the schedule S will be accepted/rejected in exactly the order shown by the below protocols. Provide proper reason and show your working. [5]

Basic 2PL (add locks to the transactions) with timestamp using deadlock avoidance (wait-for)



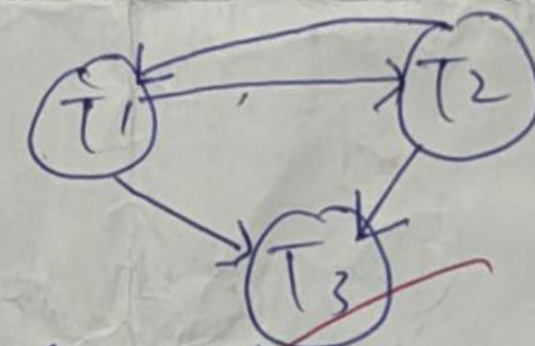
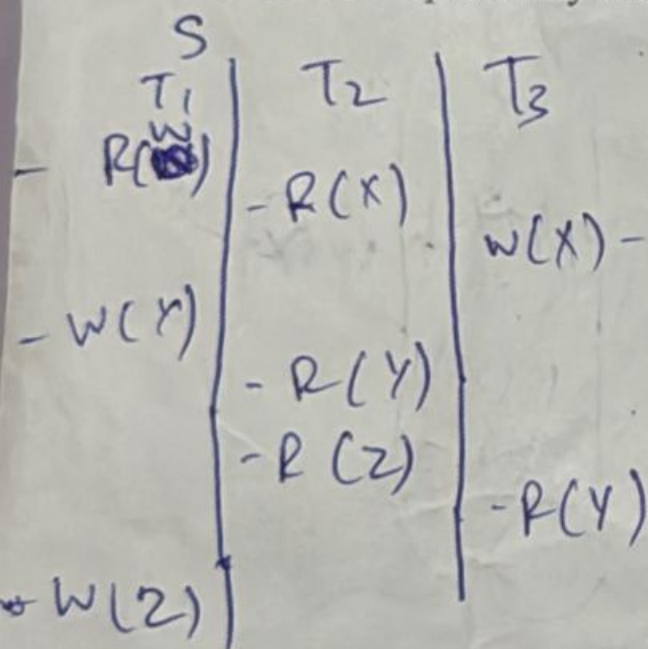
Hence, S will be accepted because all transactions operations are obeying the Basic 2PL protocols.

CLO 3#: To develop a database solution for given scenario/challenging problem in the domain of database systems.

Q3: Consider the following schedule

S: $r_1(W)$; $r_2(X)$; $w_3(X)$; $w_1(Y)$; $r_2(Y)$; $r_2(Z)$; $r_3(Y)$; $w_1(Z)$

Draw the serializability (Precedence) graph for this schedule. State whether this schedule is conflict-serializable or not. If the schedule is conflict-serializable, write down the equivalent serial schedule(s) otherwise explain why it is not.



As graph contains cycle, so it is not conflict serializable.

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