

Yeury Galva Liriano  
Homework 4

Question 1)

$R()$  → read

$w()$  - write

① $T_1$	$T_2$
$R(A)$	$R(A)$
$w(A)$ commit	$w(A)$ commit
$R(B)$	$R(B)$
$w(B)$ commit	$w(B)$ commit

② Cascade schedule

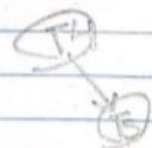
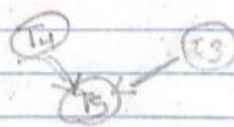
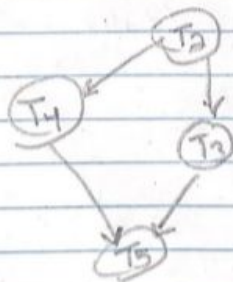
$T_1$	$T_2$
$R(A)$ $w(A)$ commit	$R(A)$ $w(A)$ commit
$R(B)$ $w(B)$ commit	$R(B)$ $w(B)$ commit

## Question 2)

1. The given Precedence graph is not containing any cycle so it is Conflict Serializable schedule.
2. To get its equivalent serial schedule we need to do topological ordering to the given graph.
3. That is first select the node having indegree is 0 [no incoming edges]
4. After that delete the vertex and edges that are outgoing from the vertex.
5. So again select the vertex indegree is 0 do the same procedure until all vertices are over.

Topological ordering  $T_1, T_2, T_3, T_4, T_5$

- 1) Delete ( $T_1$ )
- 2) Delete ( $T_2$ )
- 3) Delete ( $T_3$ )



- 4) Delete ( $T_4$ )



- 5) Delete ( $T_5$ )

$T_1, T_2, T_3, T_4, T_5$