

Pledge of Honor

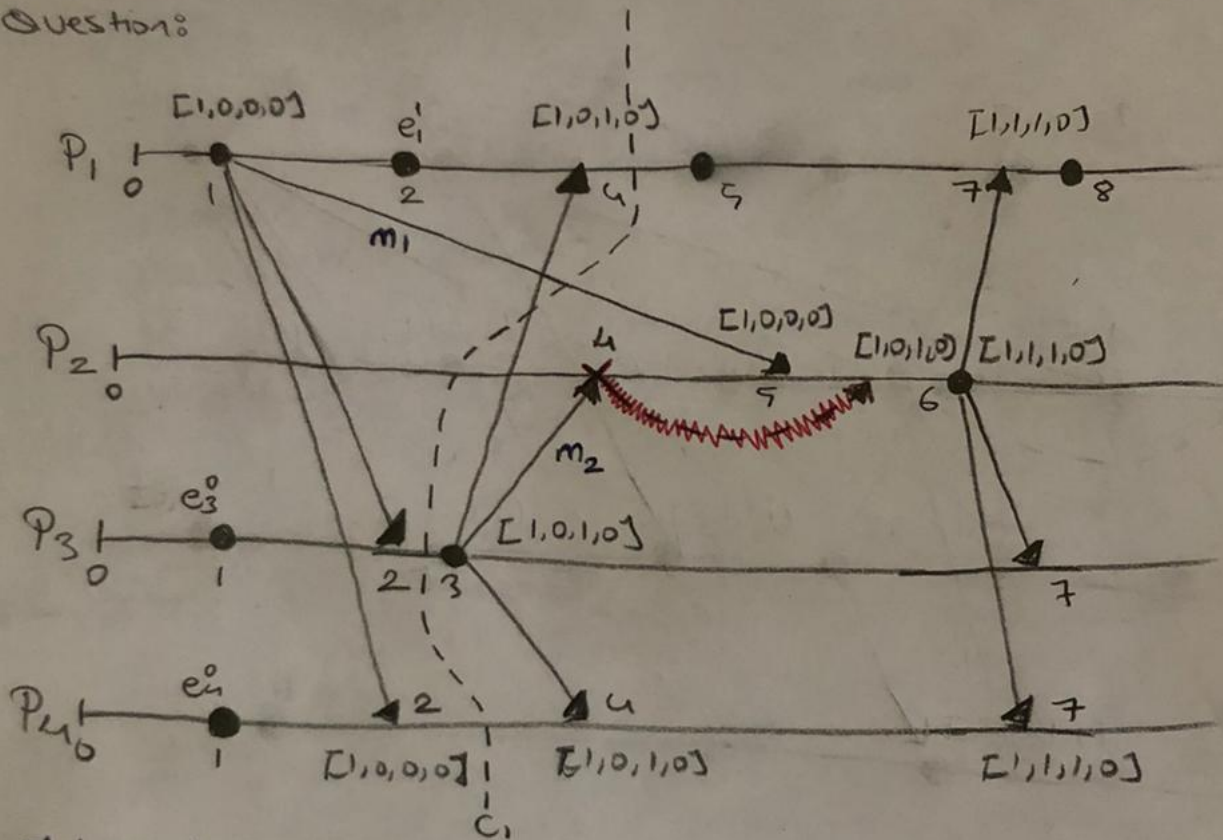
- I pledge on my honor that I will not give, receive or use any unauthorized assistance on the online assignments.
- I pledge to obey rules for taking the online assignments of COMPUS/515.

Signature: [Signature]

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Question:



- Lamport timestamp fails to capture causality, m_2 should be delivered after m_1 because m_2 is sent by P_3 after it received and delivered m_1 . At P_2 , we see that using Lamport ts. m_2 is delivered before m_1 , so Lamport is not sufficient to capture causality.
- For the same case, we see that when P_2 receives m_2 it sees that P_2 's own VC is $[0,0,0,0]$ but message has $[1,0,1,0]$, so P_2 knows it is missing a message (from P_1 in this case) so it does not deliver. After receiving P_1 's message m_1 , P_2 delivers m_2 , which was kept in a buffer.
- The frontier of cut C_1 is: $\langle e_1^1, \emptyset, e_3^1, e_4^1 \rangle$.
It is inconsistent because e_7^1 is receipt of a message emitted by e_3^2 , which is not in this cut.