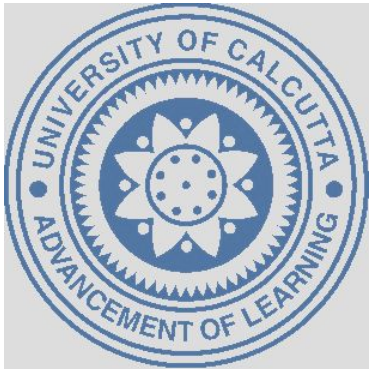
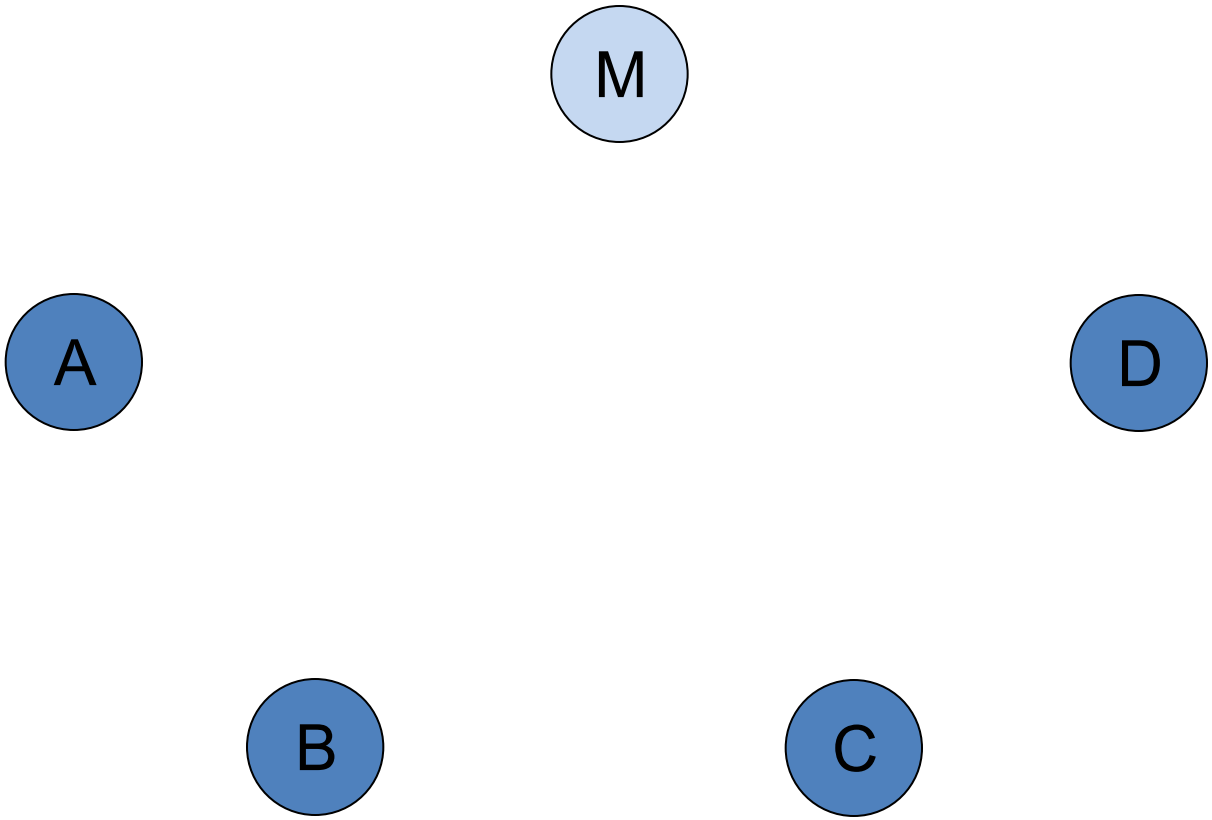
Ricart-Agrawala's Symmetric Algorithm

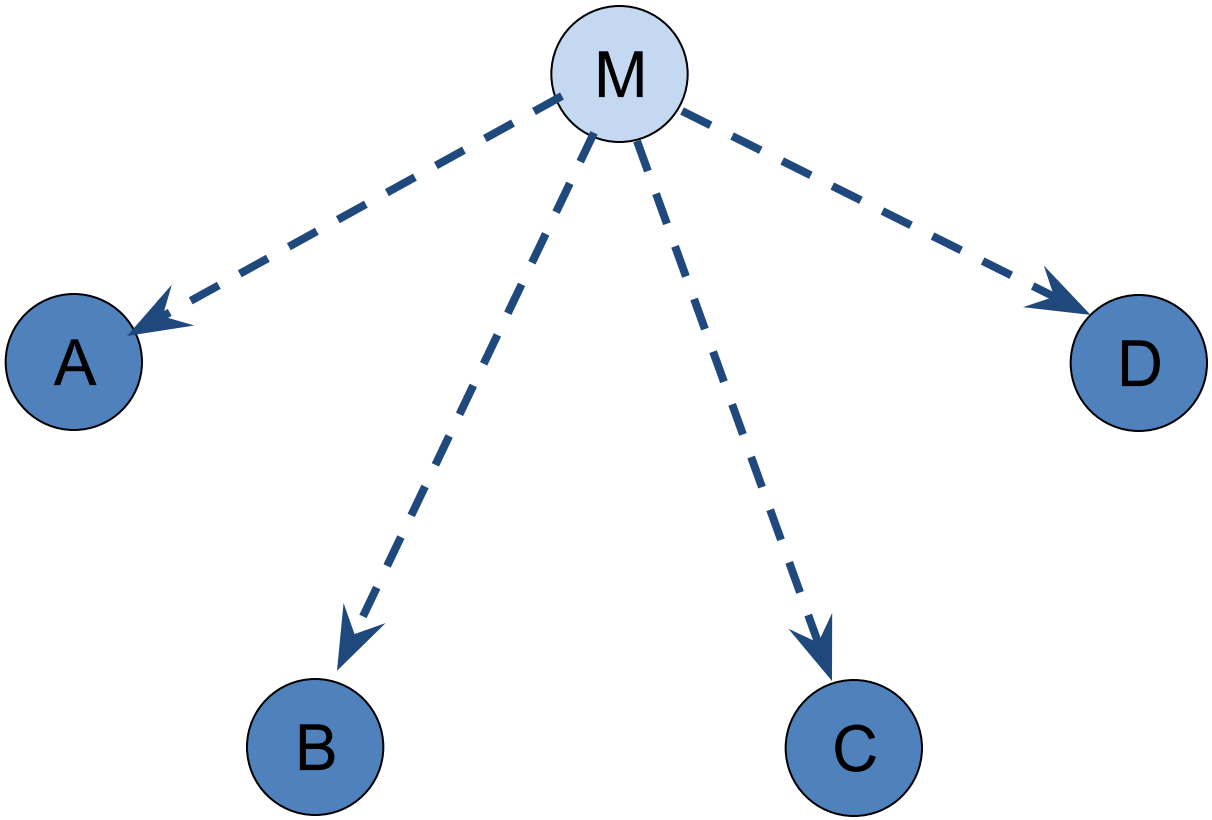
Assignment 02



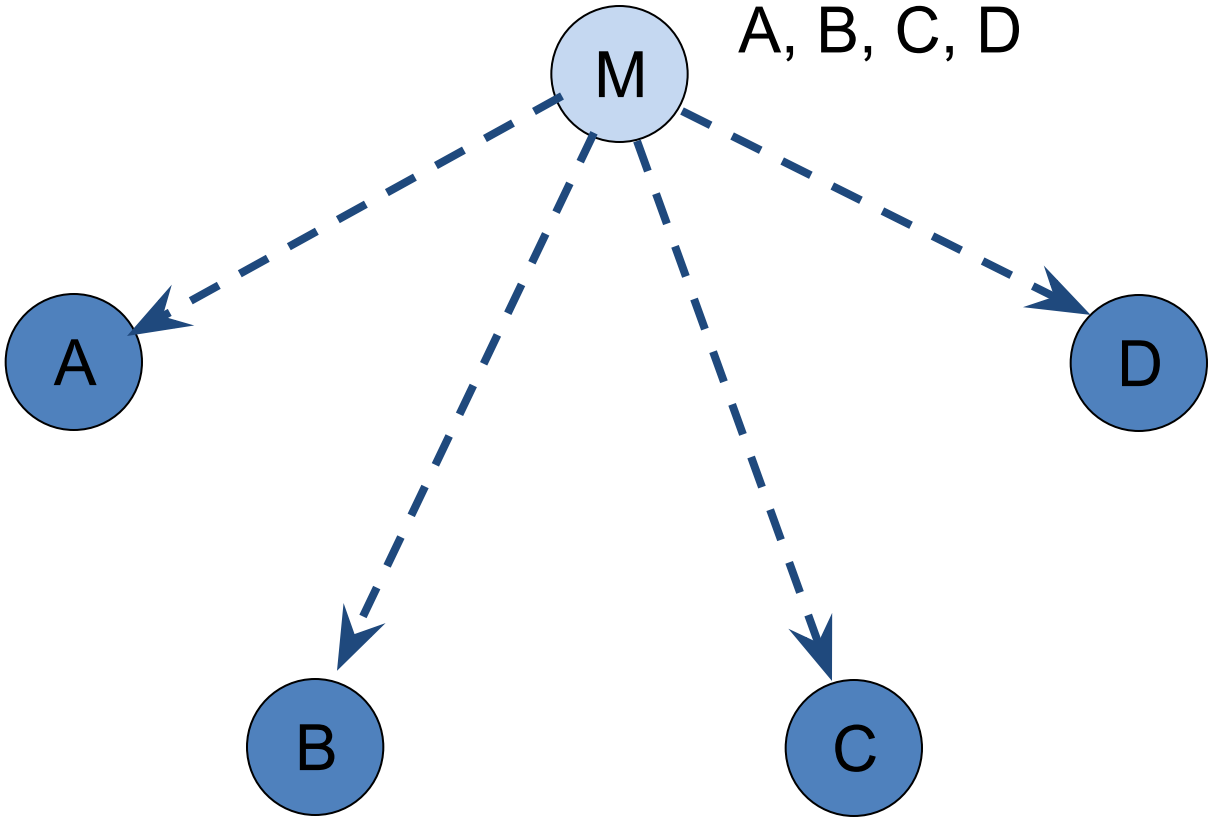
Ricart-Agrawala DME algorithm



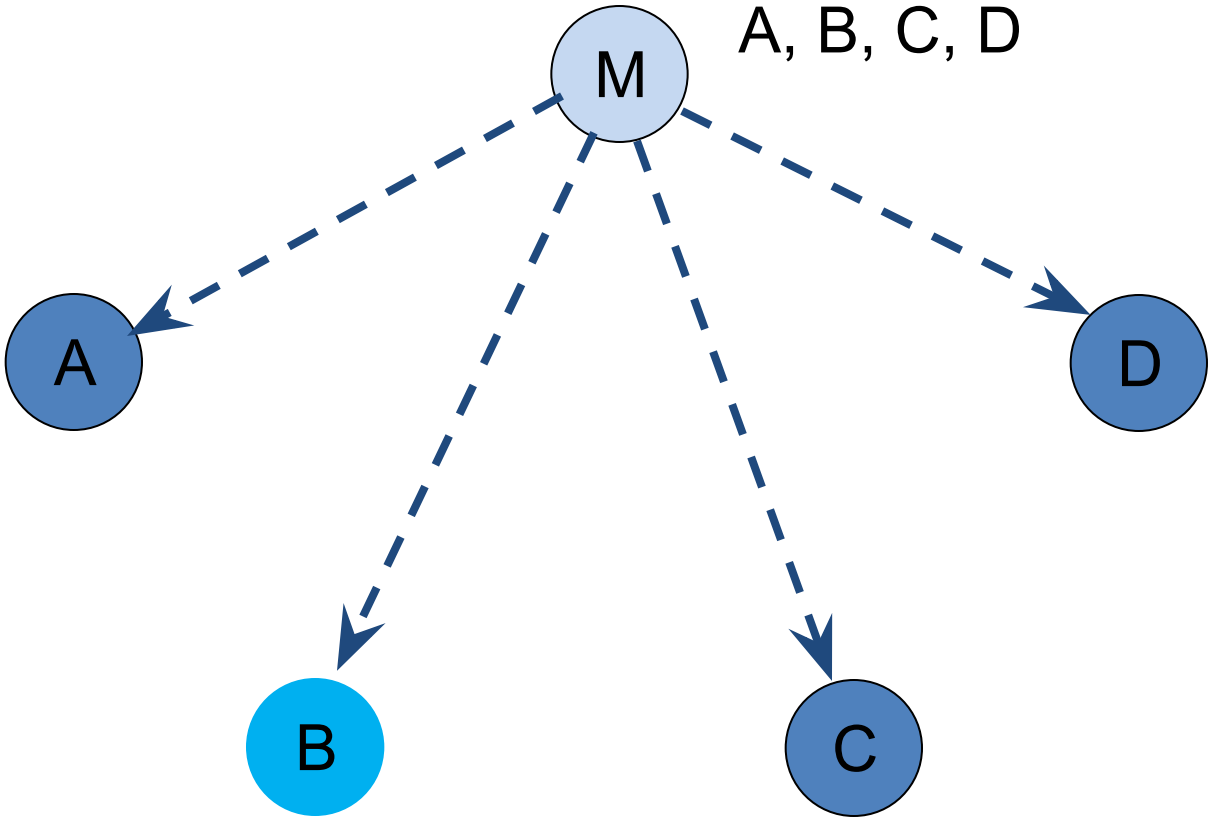
Ricart-Agrawala DME algorithm



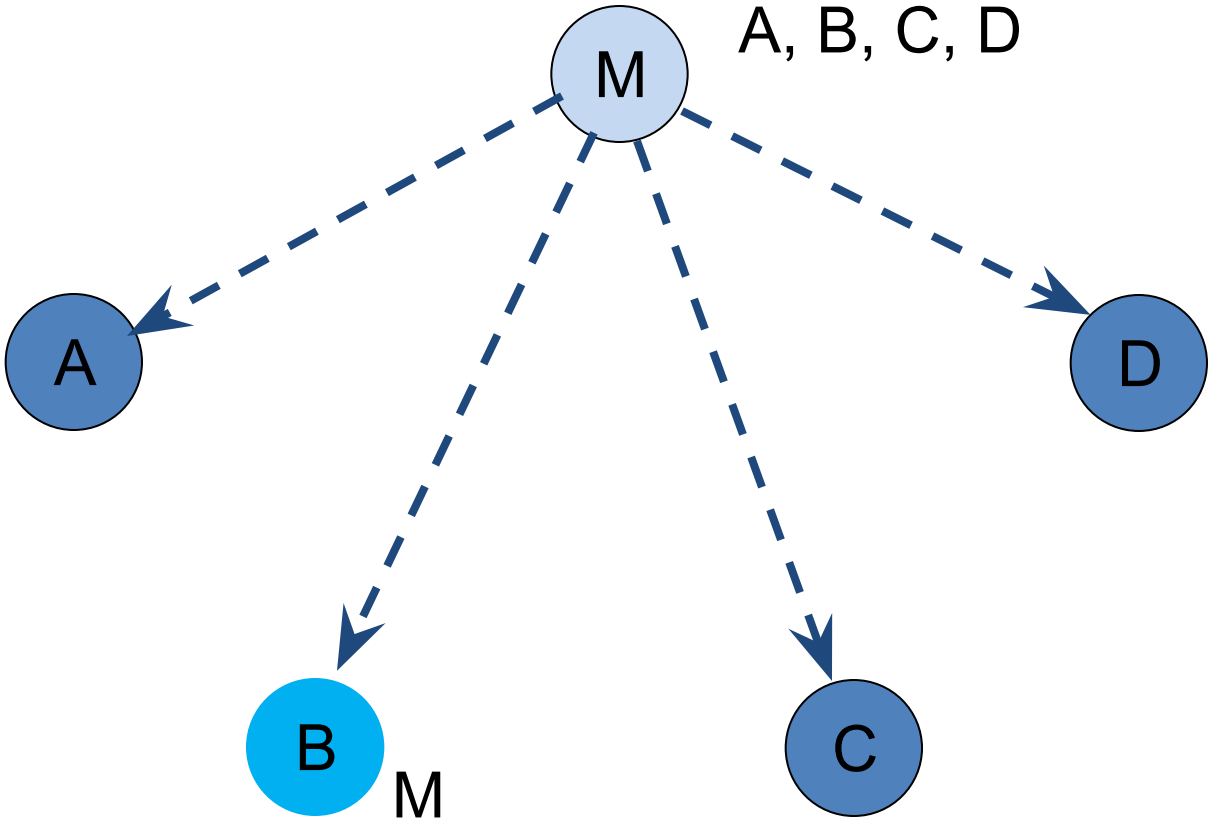
Ricart-Agrawala DME algorithm



Ricart-Agrawala DME algorithm



Ricart-Agrawala DME algorithm



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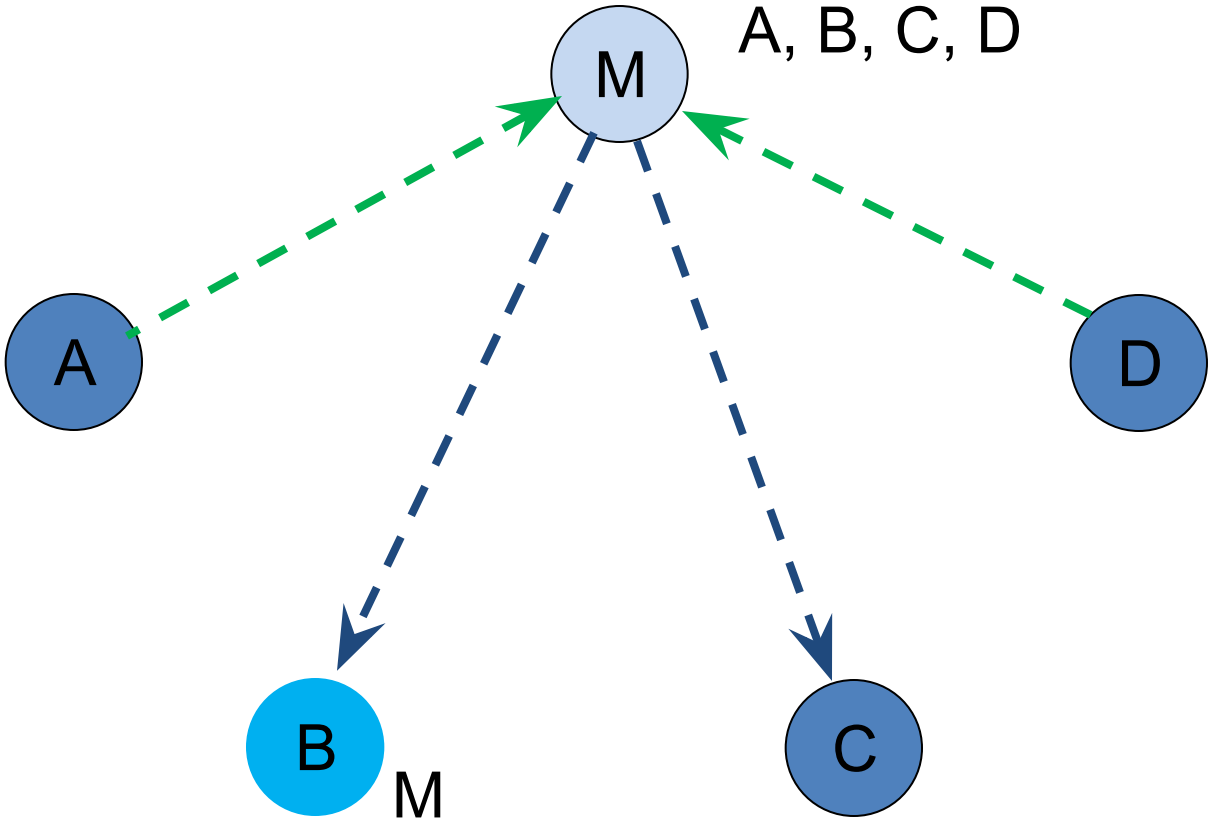

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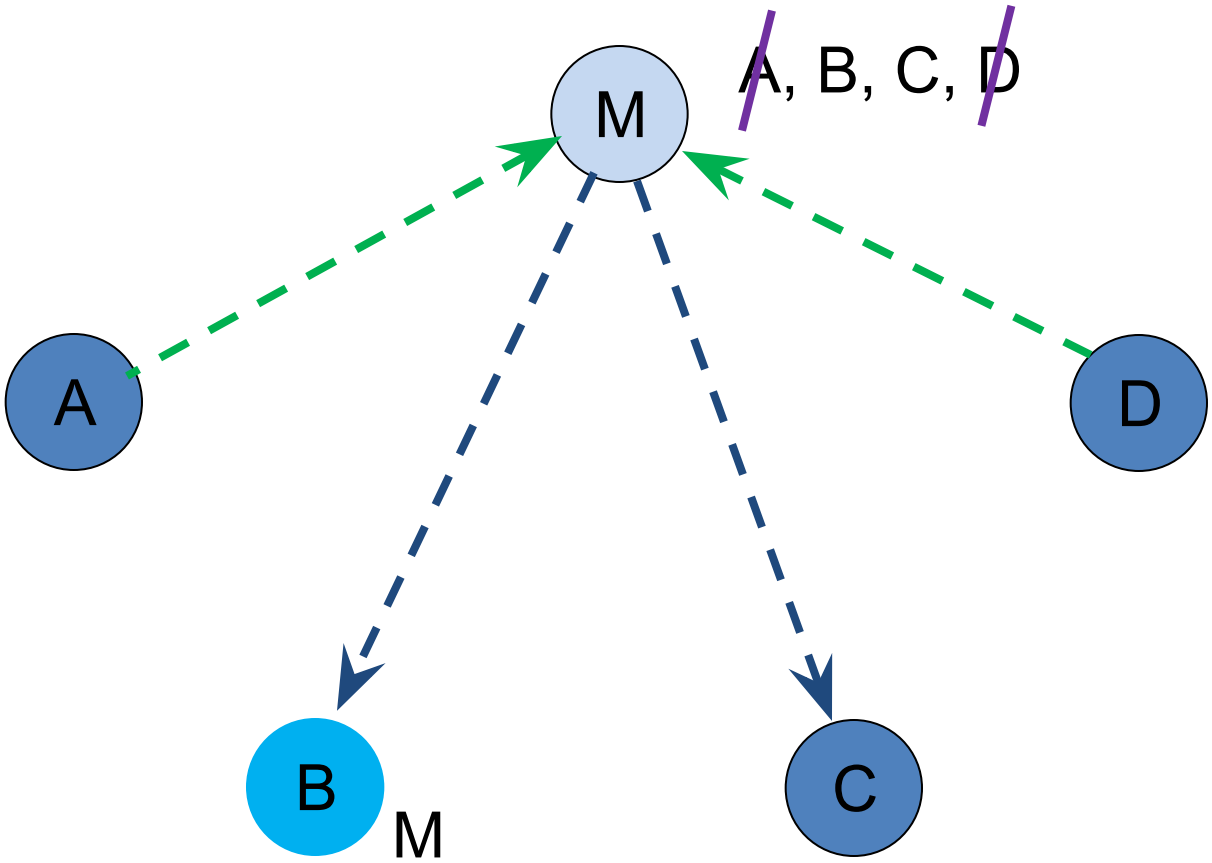
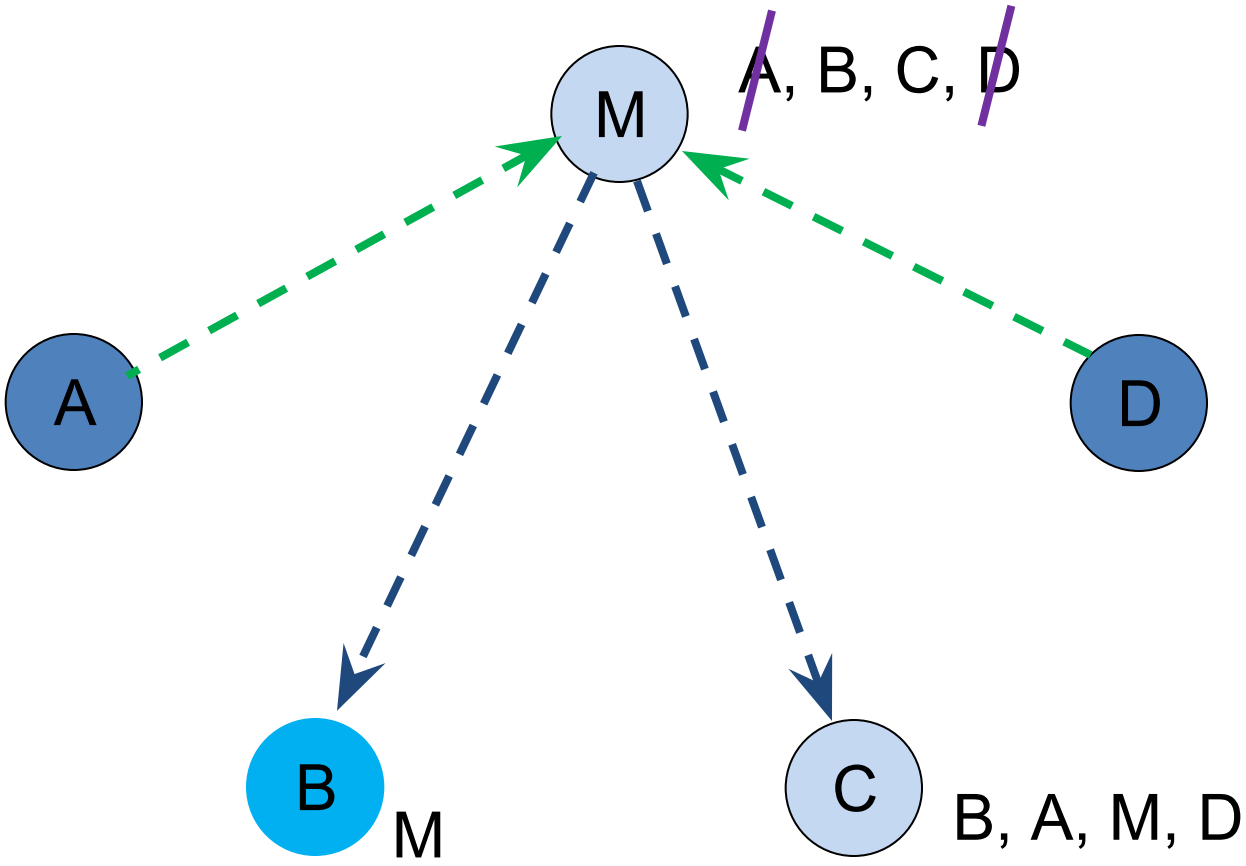
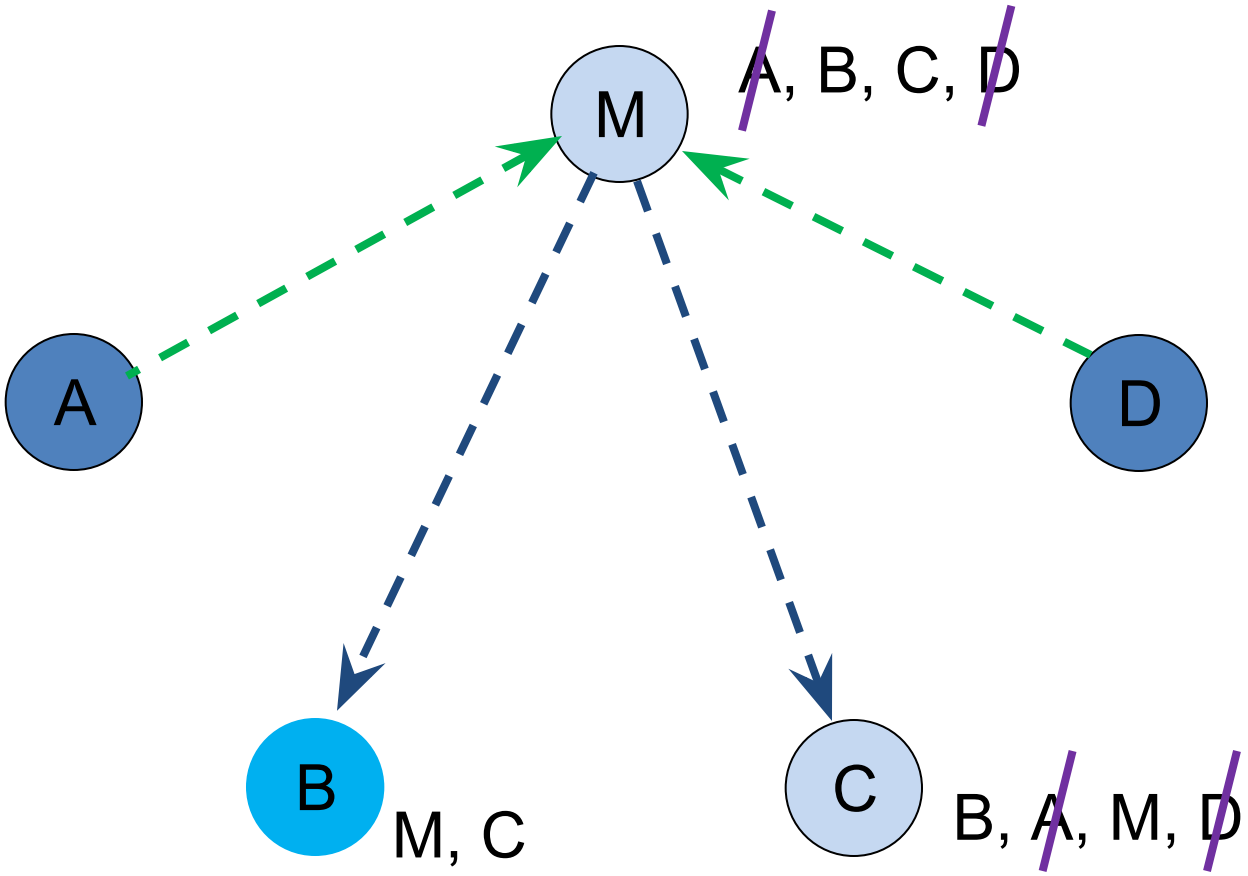


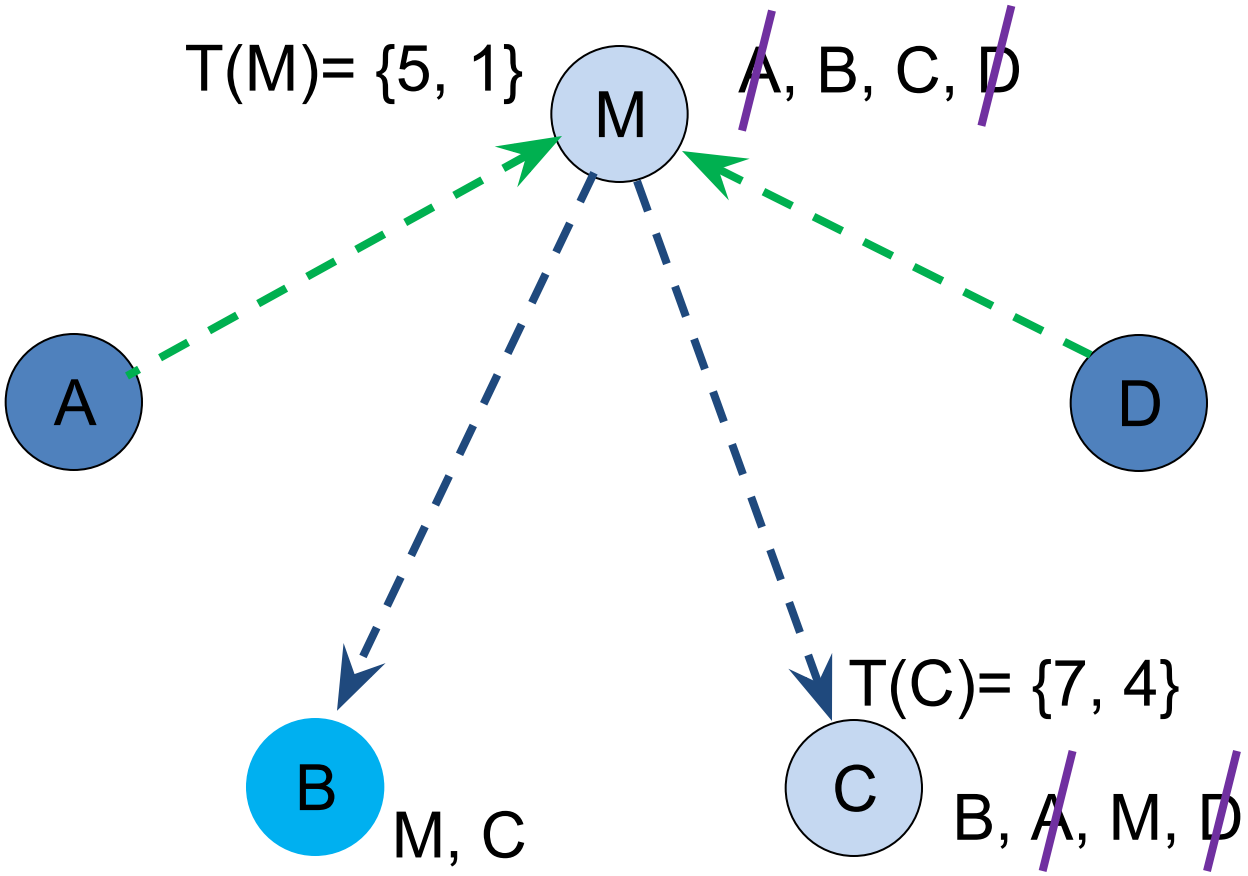
Ricart-Agrawala DME algorithm



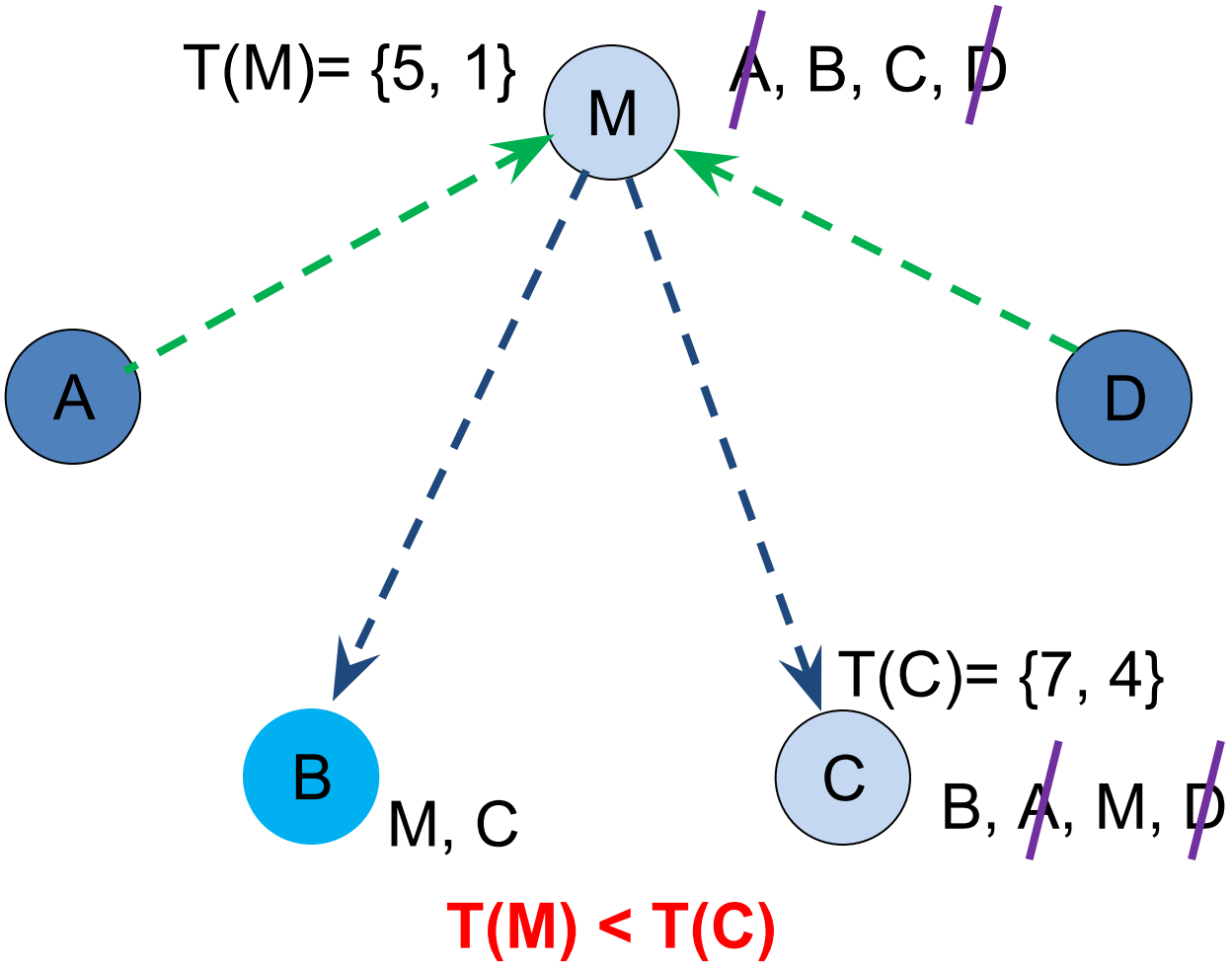
Ricart-Agrawala DME algorithm



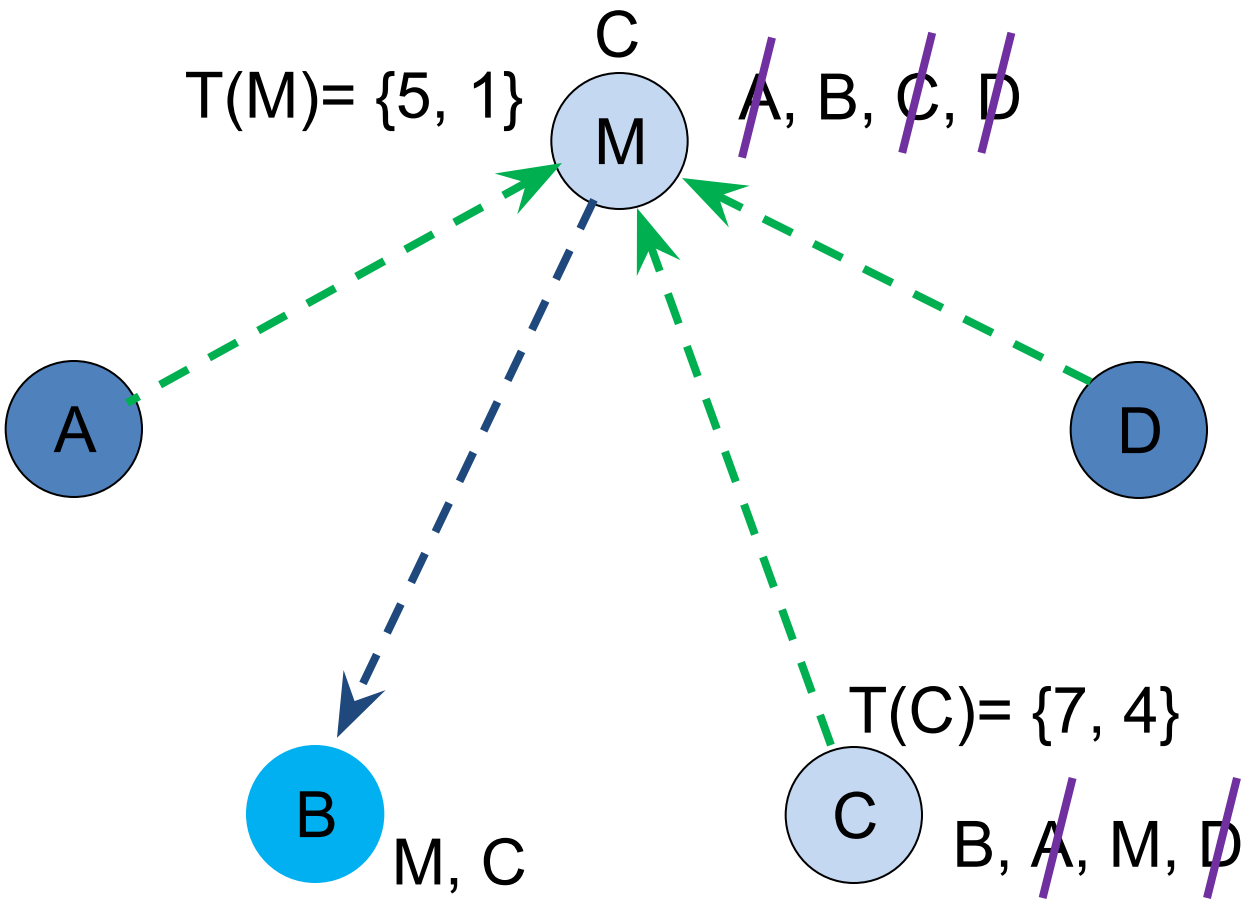
Ricart-Agrawala DME algorithm



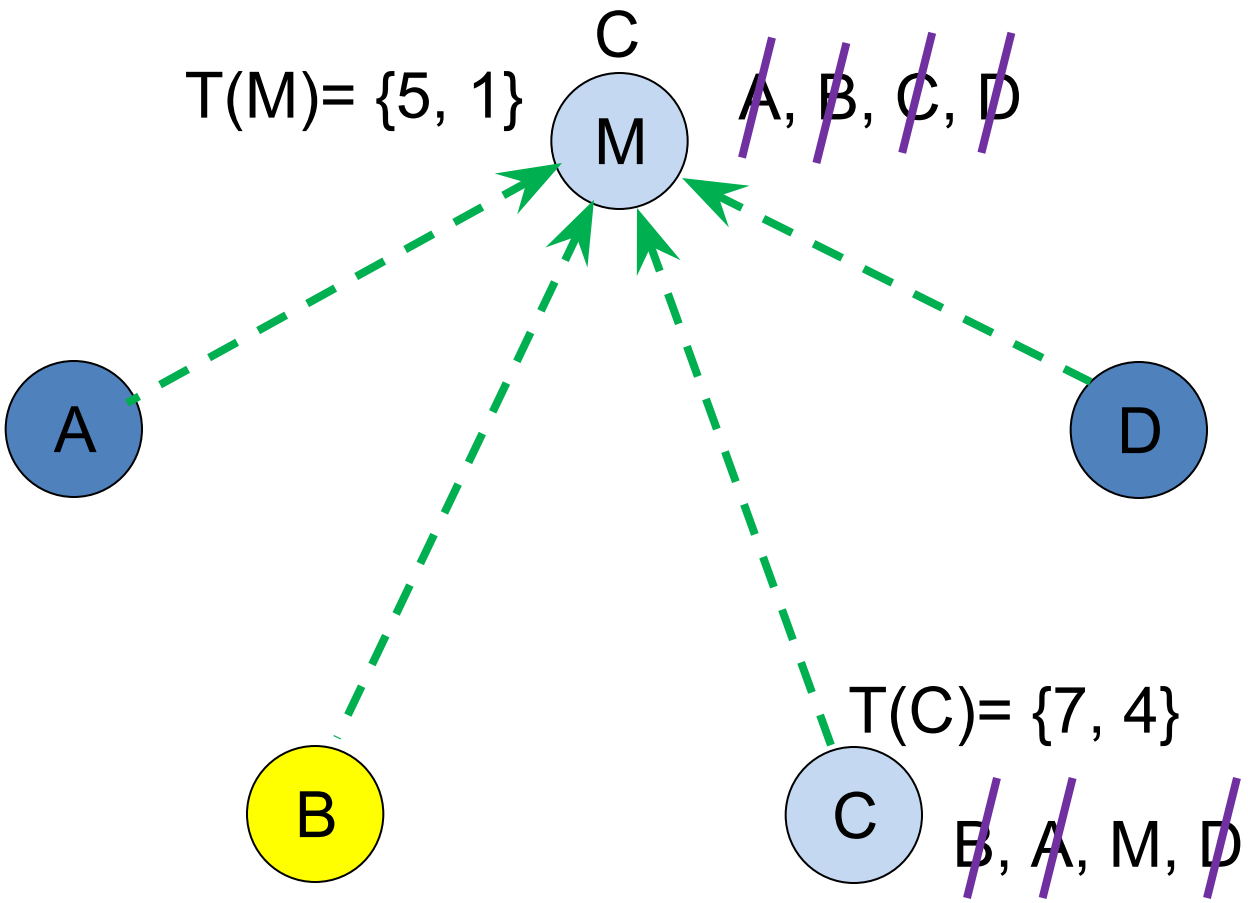
Ricart-Agrawala DME algorithm

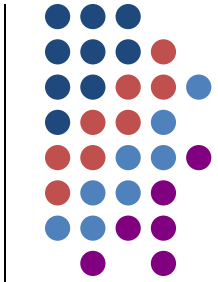


Ricart-Agrawala DME algorithm



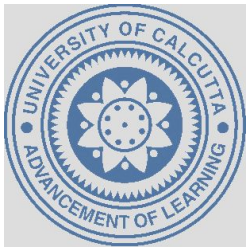
Ricart-Agrawala DME algorithm





Develop a program to implement Ricart Agrawala algorithm. Consider the following hints.

Hints

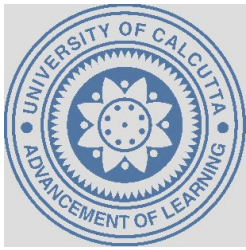


- To start with, consider a network with N nodes and say, M requests. Assign time stamp for each request
- Each requesting node, say C, stores a list for other N-1 nodes
- Initially, this list will have status 0 for each entry as none of the requested nodes have sent Go-Ahead response

Hints

- Change the status against a node A in the list of C to 1, when Go-Ahead comes from node A to node C.
- Node C enters CS when all N-1 entries in its list have status 1 - SUCCESS
- Two candidates C1 and C2 compare time stamps for their requests and one of them sends Go-Ahead only

Hints



- A node that cannot send Go-Ahead immediately saves id of requesting node in a second local list
- Run till all M requests get SUCCESS
- Print status of lists after every time after a node is allowed to enter its CS (SUCCESS)