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COP 5615 Distributed Operating Systems Principles Project 2

- The question asks us to create a starting node that is the node from which the rumour starts and can be also considered as the child actor that receives a rumour from the another actor.
- The nodes have arbitrary neighbours arranged in the four topologies- **Line, Full Network, 3D Grid and Imperfect 3D**.
- **Gossip Protocol Convergence Condition**-These nodes keep a track of the rumors and stop spreading the rumors once they have heard the same rumor 10 times. Every node converges once it has heard the rumour for 10 times and this stops spreading the rumour.
- **Pushsum Protocol Convergence Condition**- Every node has a parameter w. In our algorithm the initial weight of every node is 1 and the sum of every node is equal to the actor id.

Largest values worked with-
Gossip Algorithm-

- **Line-**1000
- **Full-**3000
- **3D Grid-**1728
- **Imperfect 3D-**1728

Pushsum Algorithm-

- **Line-**1000
- **Full-**3000
- **3D Grid-**1728
- **Imperfect 3D-**1728