Project 2

Keerthana Bhuthala.   Santhi Sushma Katragadda

5251-1292   1748-9431

Algorithms:
Gossip, Push-Sum

Topologies:
Line, Full, Random 2D, Imperfect Line, Torus, 3D

How to run?

"mix run proj2.exs   <numNodes> <topology> <algorithm>"

Bonus - Failure Scenario

"mix run proj2.exs   <numNodes> <topology> <algorithm> <failedPercent>"

Here we considered failedPercent to be percentage of inactive nodes – where the status of nodes is inactive and cannot start transmission. failedPercent can be given as input by the user and as we enter the failedPercent some of the nodes become inactive and cannot transmit. This mixed topology is given as input to the algorithm.

Maximum manageable network for various topologies

	Gossip	Push-Sum
Line	1024	512
Full	100000	2048
Random 2D Grid	100000	4096
3D	100000	2048
Torus	100000	4096
Imperfect Line	1024	512