**Team members**

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**What is working**

* We were able to achieve 100% convergence for Gossip for all the four network topologies (line, full, 2D grid, imperfect 2D grid).
* Convergence in gossip algorithm is achieved when the spread is 100%. Spread is concluded as 100 percent when all the nodes have been infected with the gossip at least once
* We were able to achieve 100% convergence for push-sum algorithm for all the four topologies.
* Convergence in push-sum algorithm is achieved when the s/w ratio for all the actors do not change more than 10-10 in three consecutive rounds.

**Largest Network achieved**

**Gossip algorithm**

* Line network: 10000 number of nodes
* Full network: 100000 number of nodes
* 2D grid network: 100000 number of nodes
* Imperfect 2D grid network: 100000 number of nodes

**Push-Sum algorithm**

* Line network: 500 number of nodes
* Full network: 100000 number of nodes
* 2D grid network: 1000 number of nodes
* Imperfect 2D grid network: 10000 number of nodes

**Instructions to run**

We are executing the code through command line interface using the command

**dotnet fsi --langversion:preview program.fsx <numNodes> <topology> <algorithm>**

