

DOS PROJECT 2 READ ME
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INSTALLING AND RUNNING THE PROGRAM:

Prerequisites:

1. Install sbt tool:

- a. `echo "deb https://dl.bintray.com/sbt/debian/ /" | sudo tee -a /etc/apt/sources.list.d/sbt.list`
- b. `sudo apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv 642AC823`
- c. `sudo apt-get update`
- d. `sudo apt-get install sbt`

Running the Program:

1. Unzip the project folder Project2.zip
2. Open Terminal
3. Navigate to "PushSumAndGossip" folder in the terminal
4. Run the command ***sbt "run <# of nodes> <topology> <algorithm> <optional: percentage of nodes to fail>"***

WHAT IS WORKING:

The program is working as per all the given requirements of the homework.

Gossip Protocol works for all the four given types of network topologies - full, 3D, line and imp3D. Push-Sum Protocol also works for all the four given types of network topologies.

LARGEST NETWORK FOR EACH TOPOLOGY AND ALGORITHM:

S.No.	Topoplogy	Algorithm	Max Number of Nodes
1	Full	Gossip	8000
2	Full	Push Sum	8000
3	Line	Gossip	10000
4	Line	Push Sum	100
5	3D	Gossip	10000
6	3D	Push Sum	2500
7	Imperfect 3D	Gossip	10000
8	Imperfect 3D	Push Sum	3000