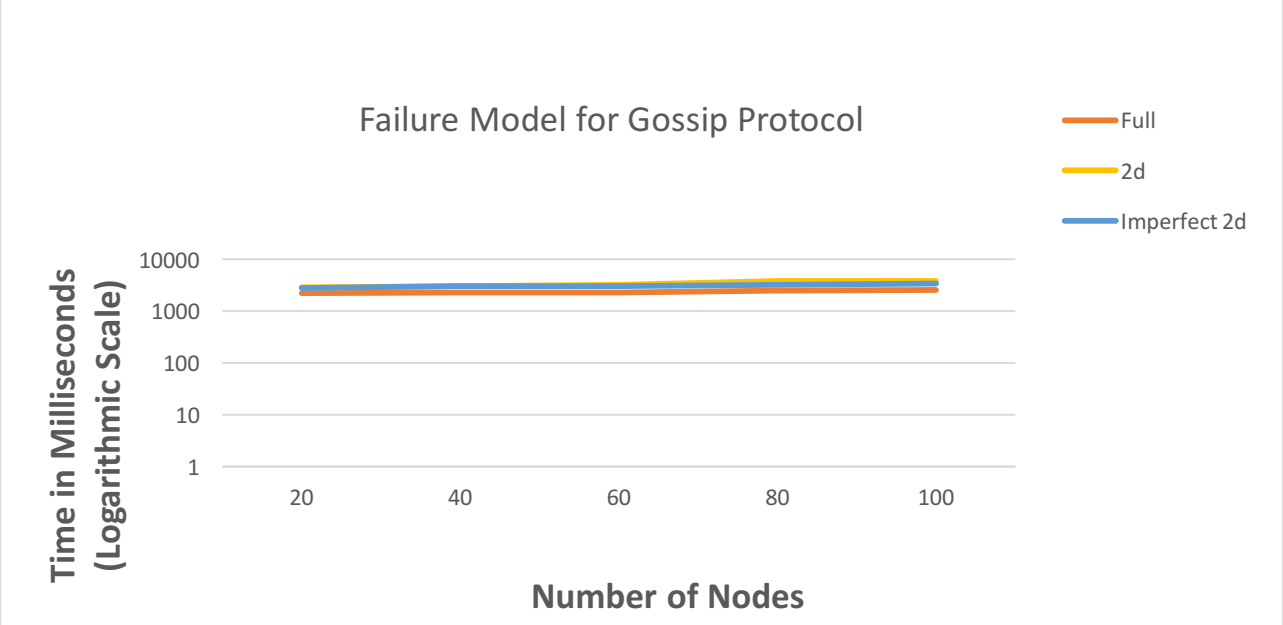
PROJECT 2 -BONUS: DISTRIBUTED OPERATING SYSTEMS

BY:
Anmol Khanna, UFID:65140549, anmolkhanna93@ufl.edu
Akshay Singh Jetawat, UFID:22163183, akshayt80@ufl.edu

We implemented a failure model in which we randomly deleted a certain number of nodes (it's an input from the user) and observed the time taken by other nodes to converge. We implemented for the Gossip protocol.



Data Supporting the above graph,

# Nodes	Full	2-d	Imp 2-d
20	2243	2830	2822
40	2255	3030	3025
60	2290	3228	3026
80	2461	3832	3224
100	2585	3838	3421

OBSERVATIONS

From our experiments and data shown above, we have come up with following key findings

- The gossip protocol is quite fault tolerant and hence the effect of failures is minimum.
- Also, we tried for both the node failures and also the connection failure's, in both cases the convergence is happening easily and quickly as seen from the graph.