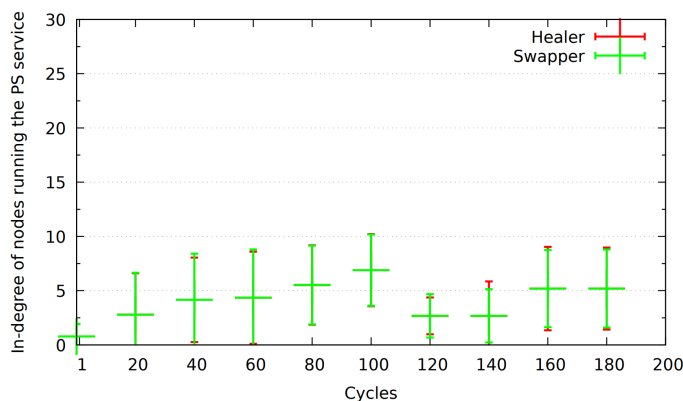


Languages and algorithms for distributed Applications : Assignement

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1 Plot of indegrees



We see that in our implementation healer and swapper provides more or less the same results. The indegree grows rapidly until the 30th cycle then the increase is slowed down because of the new-coming peer for 90 cycles. The indegrees increase rapidly again until the nodes crash but recovers as well when the nodes come back. Then the indegrees plot stay stable until the end of the algorithm. It seems to us that these results are intuitive following the requested scenario.

The program can be launch in erlang by calling `project:launch(N,H,S,C)` where N is the number of node, H the healer parameter, S the swapper parameter and C the size of the views. Generate a database can be done by calling the python script log with the same argument in the shell, like this: "python log.py N H S C". The programme can also be launch in erlang without following the scenario by bootstrapping every node before launching the protocol and for 30 cycles with this command `project:normal(N,H,S,C)`.