COP - 5615
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Project 3 – Pastry
Failure model report

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Implementation:

Once the node join is finished, the given number of failure nodes will be made inactive.

Then we:

- Update the inactive node IDs present in the leaf set of remaining nodes with the farthest node that lies in the same side of the inactive node.
- Update the inactive node IDs present in the routing table of remaining nodes with IDs of the nodes that are close to the IDs of the inactive node.

By doing the above updates, we can make the network resilient.

Observations:

No. of peers	No. of requests per peer	No. of inactive peers	Average number of hops per peer
100	10	0	2.22
100	10	10	4.25
100	10	30	3.41
100	10	50	2.81
100	10	70	1.45
500	10	0	3.24
500	10	50	5.28
500	10	100	4.15
500	10	250	3.55
500	10	400	1.87