CS5320 – Assignment #2
Implementing Distributed Snapshots

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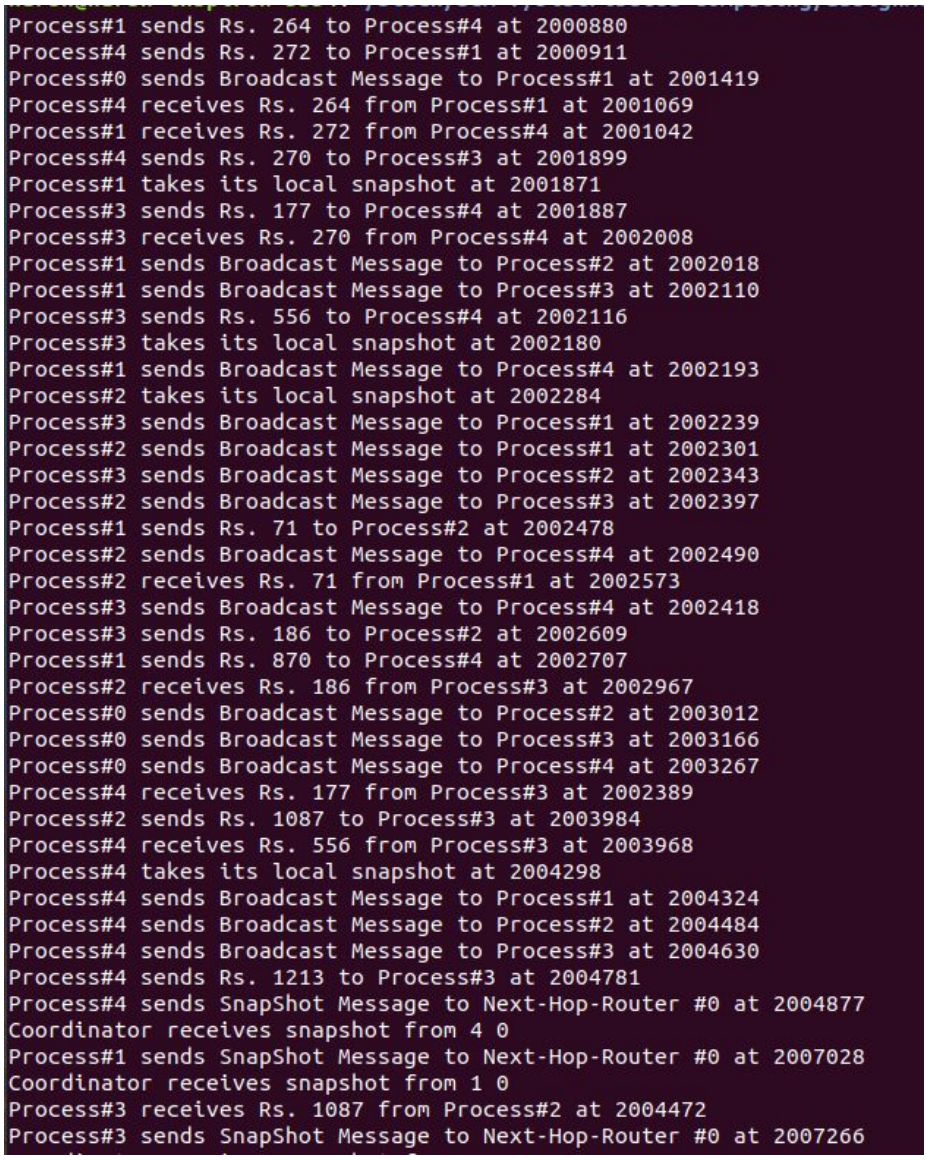
Sample Output



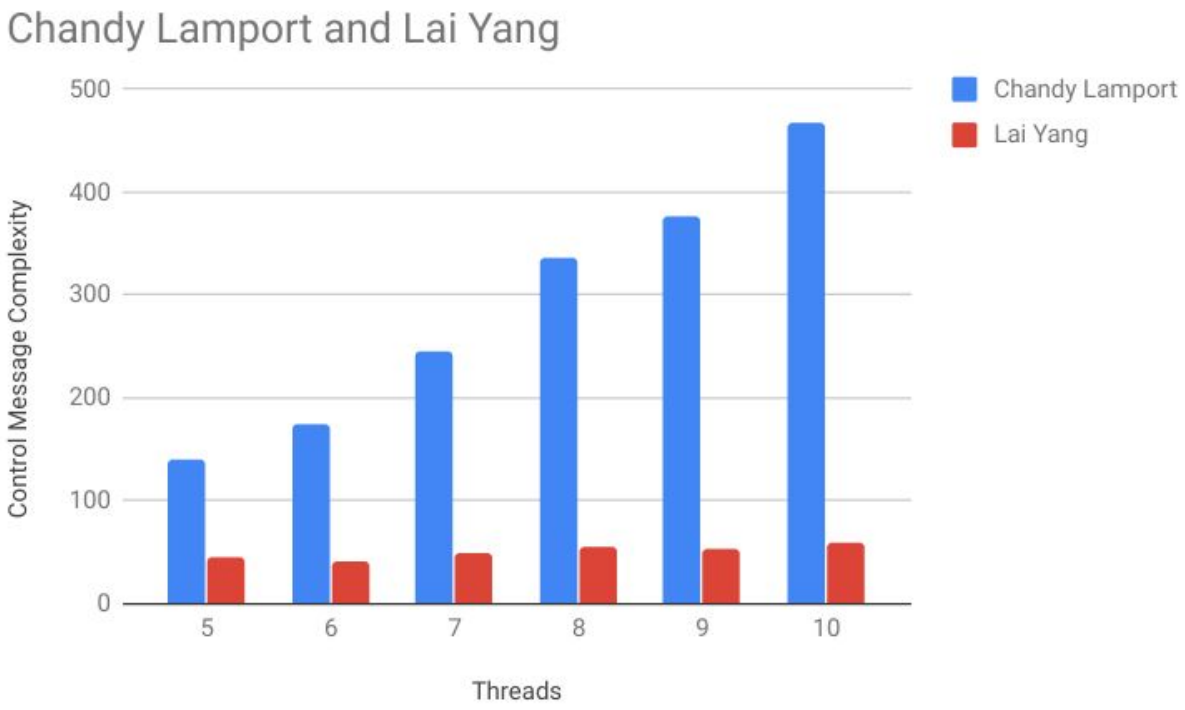
```
Process#1 sends Rs. 264 to Process#4 at 2000880
Process#4 sends Rs. 272 to Process#1 at 2000911
Process#0 sends Broadcast Message to Process#1 at 2001419
Process#4 receives Rs. 264 from Process#1 at 2001069
Process#1 receives Rs. 272 from Process#4 at 2001042
Process#4 sends Rs. 270 to Process#3 at 2001899
Process#1 takes its local snapshot at 2001871
Process#3 sends Rs. 177 to Process#4 at 2001887
Process#3 receives Rs. 270 from Process#4 at 2002008
Process#1 sends Broadcast Message to Process#2 at 2002018
Process#1 sends Broadcast Message to Process#3 at 2002110
Process#3 sends Rs. 556 to Process#4 at 2002116
Process#3 takes its local snapshot at 2002180
Process#1 sends Broadcast Message to Process#4 at 2002193
Process#2 takes its local snapshot at 2002284
Process#3 sends Broadcast Message to Process#1 at 2002239
Process#2 sends Broadcast Message to Process#1 at 2002301
Process#3 sends Broadcast Message to Process#2 at 2002343
Process#2 sends Broadcast Message to Process#3 at 2002397
Process#1 sends Rs. 71 to Process#2 at 2002478
Process#2 sends Broadcast Message to Process#4 at 2002490
Process#2 receives Rs. 71 from Process#1 at 2002573
Process#3 sends Broadcast Message to Process#4 at 2002418
Process#3 sends Rs. 186 to Process#2 at 2002609
Process#1 sends Rs. 870 to Process#4 at 2002707
Process#2 receives Rs. 186 from Process#3 at 2002967
Process#0 sends Broadcast Message to Process#2 at 2003012
Process#0 sends Broadcast Message to Process#3 at 2003166
Process#0 sends Broadcast Message to Process#4 at 2003267
Process#4 receives Rs. 177 from Process#3 at 2002389
Process#2 sends Rs. 1087 to Process#3 at 2003984
Process#4 receives Rs. 556 from Process#3 at 2003968
Process#4 takes its local snapshot at 2004298
Process#4 sends Broadcast Message to Process#1 at 2004324
Process#4 sends Broadcast Message to Process#2 at 2004484
Process#4 sends Broadcast Message to Process#3 at 2004630
Process#4 sends Rs. 1213 to Process#3 at 2004781
Process#4 sends SnapShot Message to Next-Hop-Router #0 at 2004877
Coordinator receives snapshot from 4 0
Process#1 sends SnapShot Message to Next-Hop-Router #0 at 2007028
Coordinator receives snapshot from 1 0
Process#3 receives Rs. 1087 from Process#2 at 2004472
Process#3 sends SnapShot Message to Next-Hop-Router #0 at 2007266
```

Graphs Section

Topology - Complete Graph
Lambda - 1
Bank Balance - 1000
Max Transferred Amount - 200000

READINGS

Threads	Number of Snapshots Before Convergence	Chandy Lamport	Lai Yang
5	9	140	45
6	7	175	42
7	7	246	49
8	7	336	56
9	6	376	54
10	6	468	60



Observations

1. Lai Yang always has lesser complexity than Chandy Lamport.

Lai Yang Complexity = O(No of Nodes)
Chandy Lamport = O(No of Edges)
This is because Lai Yang sends messages along the spanning tree edges. But Chandy Lamport sends along all the edges.