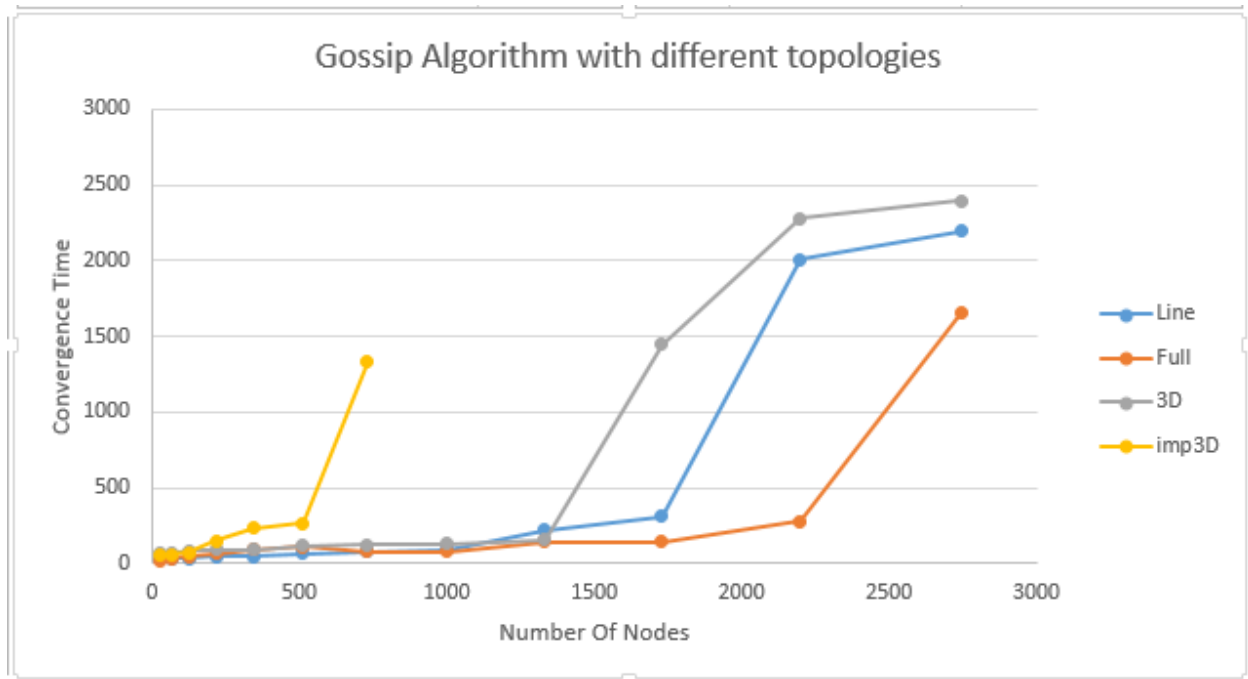# Report – Project 2

Following is the graph of the Gossip algorithm implemented using different topologies –

Following are the tables for the above graph –
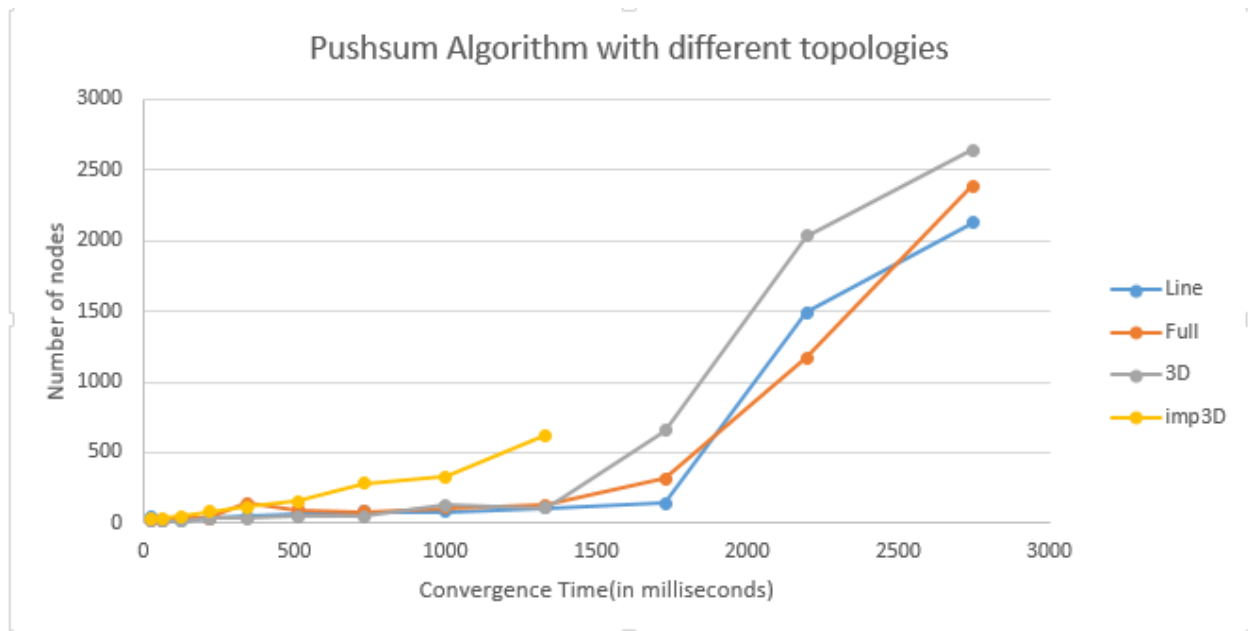
Line	
x(no of nodes)	y(convergence time in milliseconds)
27	31
64	32
125	32
216	47
343	47
512	63
729	78
1000	94
1331	219
1728	313
2197	2006
2744	2196

Full	
x(no of nodes)	y(convergence time in milliseconds)
27	16
64	31
125	47
216	62
343	94
512	110
729	78
1000	78
1331	141
1728	140
2197	281
2744	1656

3D	
x(no of nodes)	y(convergence time in milliseconds)
27	74
64	68
125	84
216	91
343	91
512	116
729	122
1000	131
1331	154
1728	1448
2197	2280
2744	2397

Imperfect3D	
x(no of nodes)	y(convergence time in milliseconds)
27	55
64	61
125	71
216	147
343	231
512	267
729	1331

Following is the graph of the Gossip algorithm implemented using different topologies –

Pushsum Algorithm with different topologies

Following are the tables for the above graph –

Line	
x(no of nodes)	y(convergence time in milliseconds)
27	47
64	16
125	15
216	31
343	47
512	62
729	78
1000	78
1331	110
1728	141
2197	1490
2744	2125

Full	
x(no of nodes)	y(convergence time in milliseconds)
27	16
64	16
125	31
216	31
343	141
512	94
729	78
1000	109
1331	125
1728	317
2197	1172
2744	2390

3D	
x(no of nodes)	y(convergence time in milliseconds)
27	15
64	15
125	15
216	31
343	31
512	47
729	47
1000	125
1331	110
1728	657
2197	2031
2744	2641

Imperfect3D	
x(no of nodes)	y(convergence time in milliseconds)
27	31
64	32
125	47
216	78
343	112
512	156
729	281
1000	328
1331	625