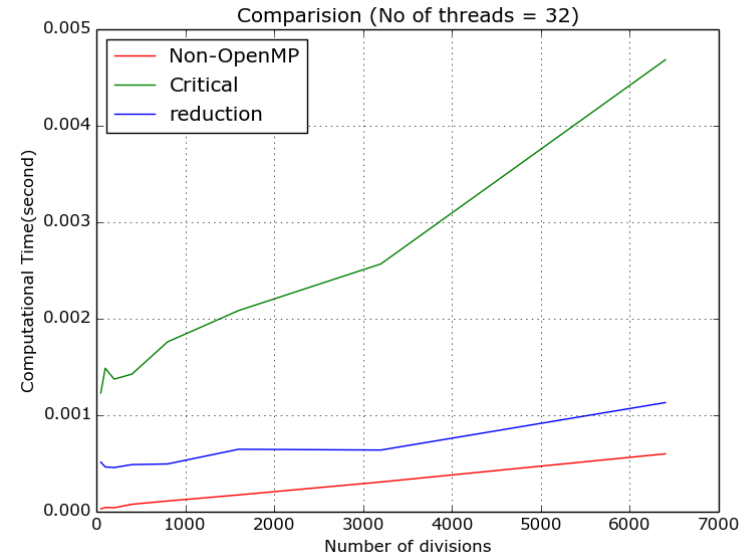
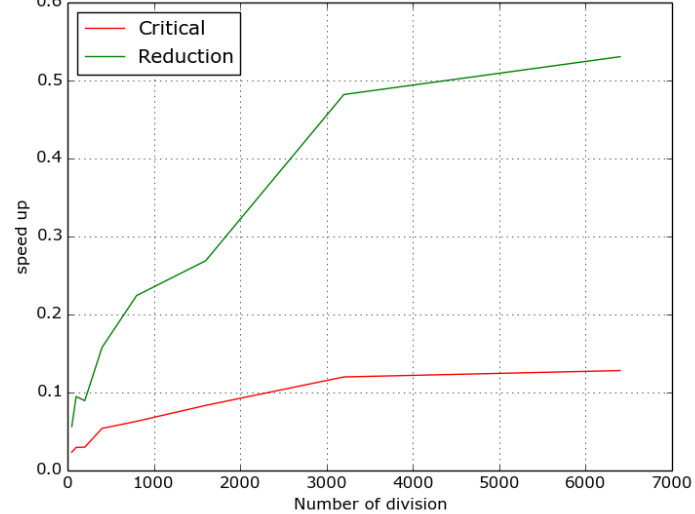


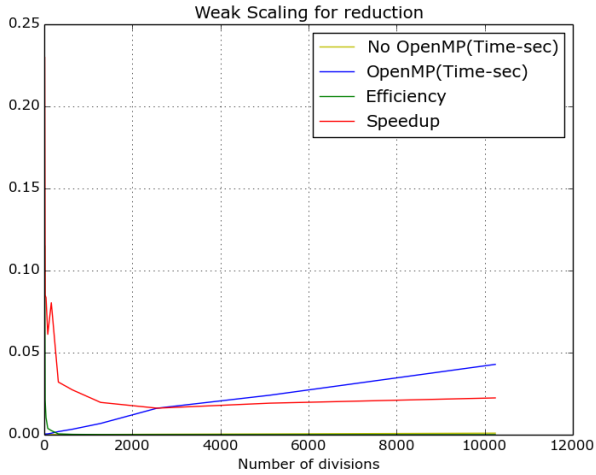
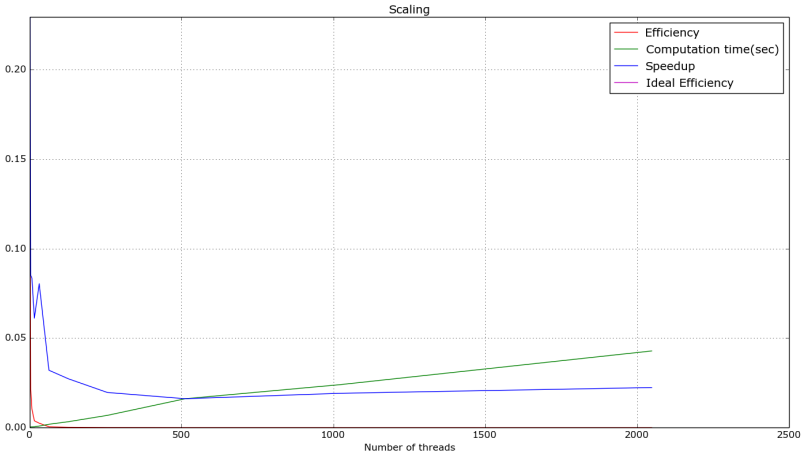
Comparison between three strategies (threads = 32)

Divisions	Serial Computational time(sec)	Critical		Reduction	
		Computational time(sec)	speedup	Computational time(sec)	speedup
50	0.000029	0.001231	0.0235581	0.000514	0.0564202
100	0.000044	0.001487	0.0295898	0.000464	0.0948276
200	0.000041	0.001374	0.0298399	0.000458	0.0895197
400	0.000077	0.001426	0.0539972	0.000488	0.157787
800	0.000111	0.00176	0.0630682	0.000495	0.224242
1600	0.000174	0.002085	0.0834532	0.000647	0.268934
3200	0.000308	0.002568	0.119938	0.000639	0.482003
6400	0.0006	0.004684	0.128096	0.001131	0.530504

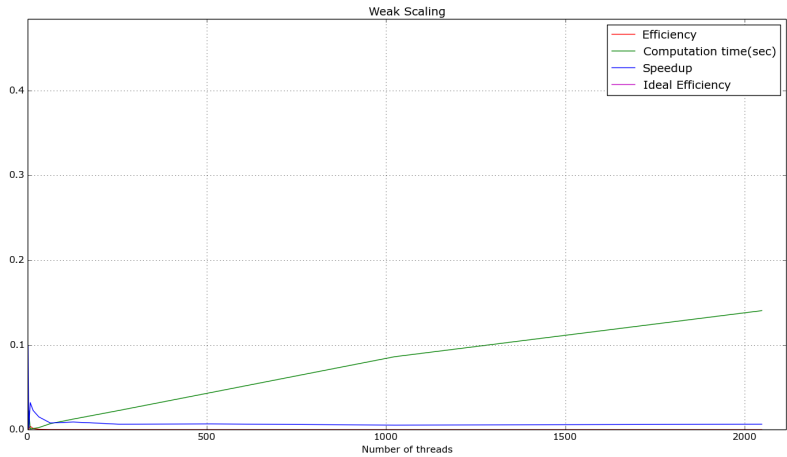
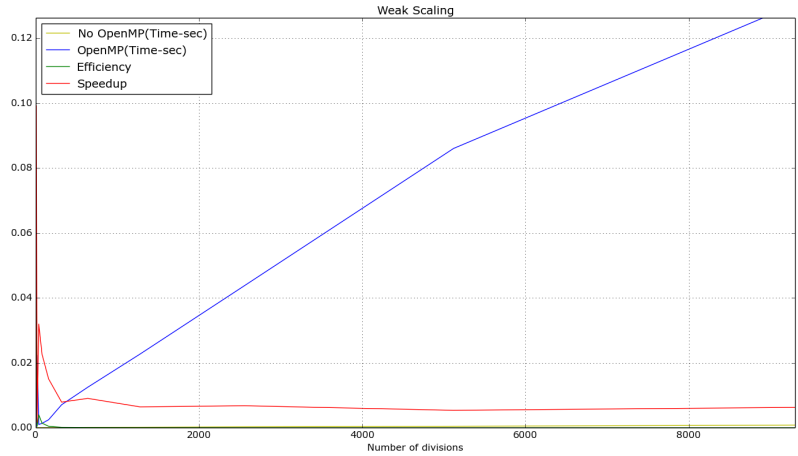
Speedup comparison between reduction and critical(threads = 32)



Weak Scaling for reduction in terms of divisions, time, efficiency and speedup					
Division	Non-OpenMP computational time(sec)	Number of threads	OpenMP computation time	Speedup	Efficiency
10	0.000037	2	0.000161	0.229814	0.114907
20	0.000037	4	0.000435	0.0850575	0.0212644
40	0.000038	8	0.000455	0.0835165	0.0104396
80	0.000031	16	0.000507	0.061144	0.0038215
160	0.000073	32	0.000908	0.0803965	0.00251239
320	0.000061	64	0.001902	0.0320715	0.000501117
640	0.000091	128	0.003334	0.0272945	0.000213239
1280	0.000135	256	0.006863	0.0196707	7.68E-05
2560	0.000261	512	0.016145	0.016166	3.16E-05
5120	0.000462	1024	0.024049	0.0192108	1.88E-05
10240	0.00096	2048	0.042842	0.0224079	1.09E-05

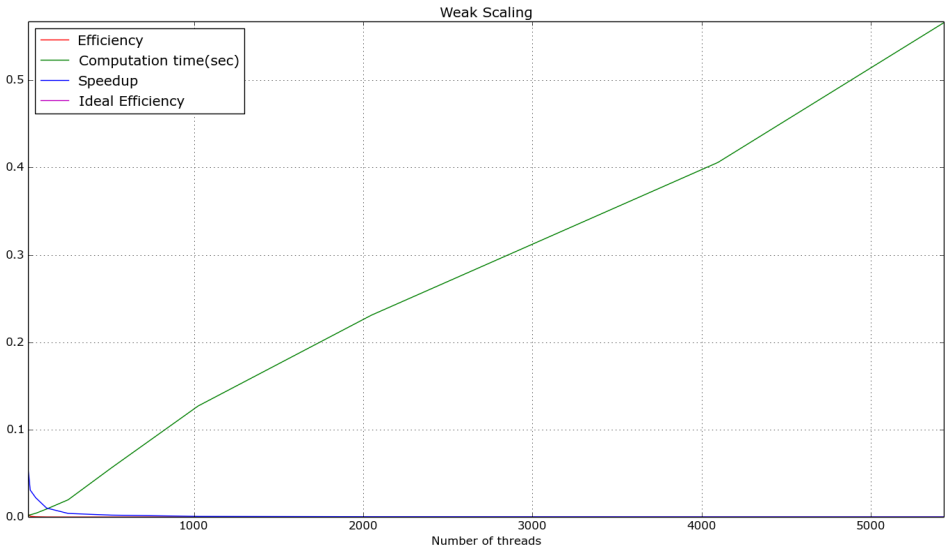


Weak Scaling for critical in terms of divisions, time, efficiency and speedup					
Division	Non-OpenMP computational time(sec)	Number of threads	OpenMP computation time	Speedup	Efficiency
10	0.000037	2	0.000353	0.0991501	0.0495751
20	0.000037	4	0.022302	0.00170388	0.000425971
40	0.000038	8	0.001002	0.0319361	0.00399202
80	0.000031	16	0.001369	0.0226443	0.00141527
160	0.000073	32	0.002456	0.0150651	0.000470786
320	0.000061	64	0.007095	0.00789288	0.000123326
640	0.000091	128	0.012484	0.00905159	7.07E-05
1280	0.000135	256	0.022689	0.00643484	2.51E-05
2560	0.000261	512	0.043767	0.00678593	1.33E-05
5120	0.000462	1024	0.086006	0.00537172	5.25E-06
10240	0.00096	2048	0.140322	0.00647796	3.16E-06



Strong Scaling (Division=700, time, eff, speedup for critical)

Number of threads	OpenMP computation time	Speedup	Efficiency
2	0.000667	0.127436	0.0637181
4	0.017495	0.0056016	0.0014004
8	0.000938	0.0906183	0.0113273
16	0.001355	0.0612546	0.00382841
32	0.00263	0.0307985	0.000962452
64	0.004288	0.0221549	0.00034617
128	0.009171	0.0103587	8.09E-05
256	0.019792	0.00414309	1.62E-05
512	0.056353	0.00221816	4.33E-06
1024	0.127085	0.000747531	7.30E-07
2048	0.230989	0.000372312	1.82E-07
4096	0.405754	0.000204557	4.99E-08
8192	0.896312	0.000104874	1.28E-08



Strong Scaling (Division=700, time, eff, speedup for reduction)

Number of threads	OpenMP computation time	Speedup	Efficiency
2	0.000204	0.416667	0.208333
4	0.019511	0.00502281	0.0012557
8	0.000359	0.236769	0.0295961
16	0.000517	0.160542	0.0100338
32	0.000803	0.100872	0.00315224
64	0.001606	0.0591532	0.000924268
128	0.002986	0.0318151	2.49E-04
256	0.006504	0.0126076	4.92E-05
512	0.013513	0.00925035	1.81E-05
1024	0.026404	0.00359794	3.51E-06
2048	0.050276	0.00171056	8.35E-07
4096	0.085647	0.000969094	2.37E-07
8192	0.185516	0.000506695	6.19E-08

