

# CENG342 HOMEWORK3 REPORT

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Core Number	Matrix size	Timing	Speed-up	Efficiency
1	1004*1004	0.003645	1.000000	1.000000
2	1004*1004	0.002268	1.606367	0.803183
3	1004*1004	0.020556	0.177013	0.059004
4	1004*1004	0.002138	1.704716	0.426179
1	104*104	0.000101	1.000000	1.000000
2	104*104	0.000138	0.733333	0.366667
3	104*104	0.000304	0.332237	0.110746
4	104*104	0.000177	0.570621	0.142655

Large matrix size =  $19050111004 \% 10000 = 1004$

Small Matrix =  $100 + 19050111004 \% 100 = 104$

Speedup=  $S(n,p) = T_{\text{serial}}(n) / T_{\text{parallel}}(n,p)$

Efficiency =  $E(n,p) = T_{\text{serial}}(n) / p * T_{\text{parallel}}(n,p)$