

CENG342 HOMEWORK3 REPORT

Name: Edanur Sarıkaya

Id: 19050111004

Core Number	Matrix size	Timing	Speed-up	Efficiency
1	1004*1004	0.005014	1.00	1.00
2	1004*1004	0.003495	1.43	0.72
3	1004*1004	0.018943	0.26	0.09
4	1004*1004	0.002060	2.44	0.61
1	104*104	0.000077	1.00	1.00
2	104*104	0.000180	0.43	0.21
3	104*104	0.000237	0.32	0.11
4	104*104	0.000219	0.35	0.09

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