

Assignment 6

CDA 5155 — Dr. Whalley — Spring 2018

David Miller

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For each method tested in this assignment, the results plotted are the average of three executions. Below is the recorded times (in milliseconds) for each execution.

Exec	reg	ur8	ae8	avx
1	0.06150	0.06150	0.0300	0.01033
2	0.06166	0.06150	0.02833	0.01116
3	0.06183	0.06150	0.02933	0.01116

Execution times for size = 32768

Exec	reg	ur8	ae8	avx
1	0.12300	0.12250	0.07100	0.03133
2	0.12300	0.12400	0.05466	0.03116
3	0.12266	0.12250	0.05616	0.03133

Execution times for size = 65536

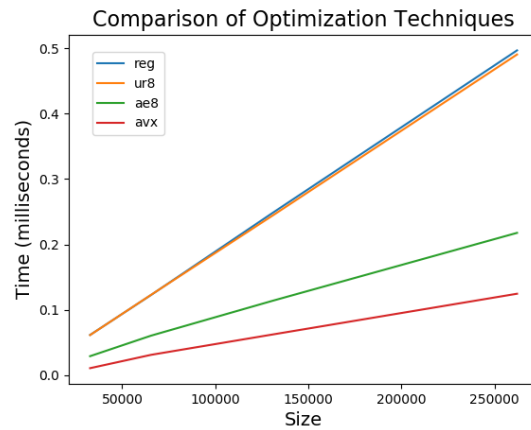
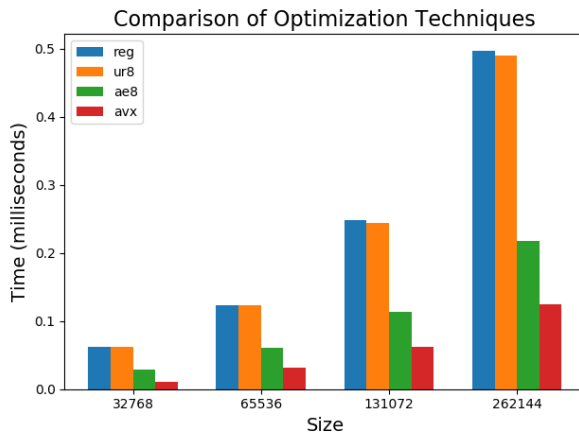
Exec	reg	ur8	ae8	avx
1	0.24483	0.24433	0.12116	0.06250
2	0.25616	0.24500	0.10983	0.06250
3	0.24516	0.24450	0.11133	0.06250

Execution times for size = 131072

Exec	reg	ur8	ae8	avx
1	0.49283	0.49050	0.21916	0.12466
2	0.49200	0.48950	0.21650	0.12466
3	0.50516	0.49116	0.21750	0.12466

Execution times for size = 262144

Below is a bar graph showing the averages times vs size. A line graph is also included to easily see scaling behavior.



The negligible difference between **reg** and **ur8** is due to out of order execution.