



CS 224

Fall 2023–2024

Lab 6 Report

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Section 3

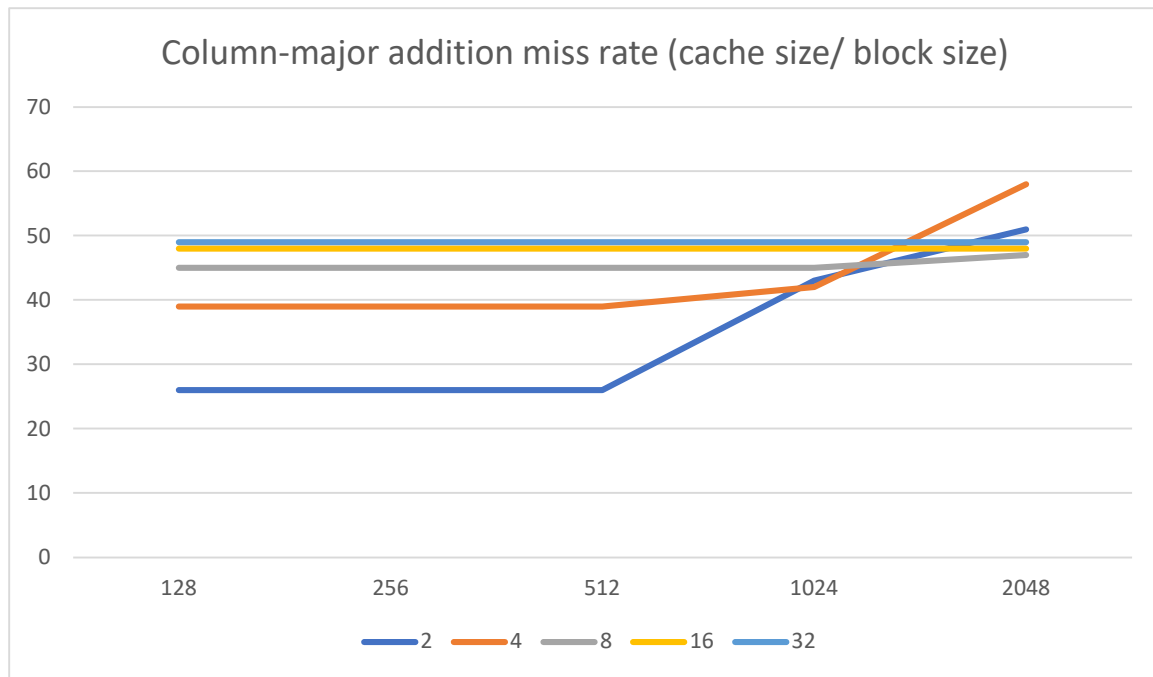
Part 1

Matrix Size: 75

Block Size Cache Size	2	4	8	16	32
128	Hit Rate: 37 # of misses: 11690	Hit Rate: 53 # of misses: 8666	Hit Rate: 61 # of misses: 7240	Hit Rate: 65 # of misses: 6536	Hit Rate: 66 # of misses: 6214
256	Hit Rate: 37 # of misses: 11660	Hit Rate: 53 # of misses: 8650	Hit Rate: 61 # of misses: 7226	Hit Rate: 65 # of misses: 6518	Hit Rate: 67 # of misses: 6177
512	Hit Rate: 52 # of misses: 8878	Hit Rate: 53 # of misses: 8617	Hit Rate: 61 # of misses: 7191	Hit Rate: 65 # of misses: 6482	Hit Rate: 67 # of misses: 6142
1024	Hit Rate: 53 # of misses: 8752	Hit Rate: 66 # of misses: 6344	Hit Rate: 62 # of misses: 6978	Hit Rate: 65 # of misses: 6452	Hit Rate: 67 # of misses: 6102
2048	Hit Rate: 53 # of misses: 8619	Hit Rate: 70 # of misses: 5640	Hit Rate: 71 # of misses: 5452	Hit Rate: 66 # of misses: 6279	Hit Rate: 67 # of misses: 6080

Matrix Size: 150

Block Size Cache Size	2	4	8	16	32
128	Hit Rate: 26 # of misses: 34115	Hit Rate: 39 # of misses: 28309	Hit Rate: 45 # of misses: 25482	Hit Rate: 48 # of misses: 24068	Hit Rate: 49 # of misses: 23361
256	Hit Rate: 26 # of misses: 34115	Hit Rate: 39 # of misses: 28309	Hit Rate: 45 # of misses: 25482	Hit Rate: 48 # of misses: 24068	Hit Rate: 49 # of misses: 23361
512	Hit Rate: 26 # of misses: 34115	Hit Rate: 39 # of misses: 28309	Hit Rate: 45 # of misses: 25482	Hit Rate: 48 # of misses: 24068	Hit Rate: 49 # of misses: 23361
1024	Hit Rate: 43 # of misses: 26289	Hit Rate: 42 # of misses: 26560	Hit Rate: 45 # of misses: 25482	Hit Rate: 48 # of misses: 24068	Hit Rate: 49 # of misses: 23361
2048	Hit Rate: 51 # of misses: 22825	Hit Rate: 58 # of misses: 19175	Hit Rate: 47 # of misses: 24349	Hit Rate: 48 # of misses: 24068	Hit Rate: 49 # of misses: 23361

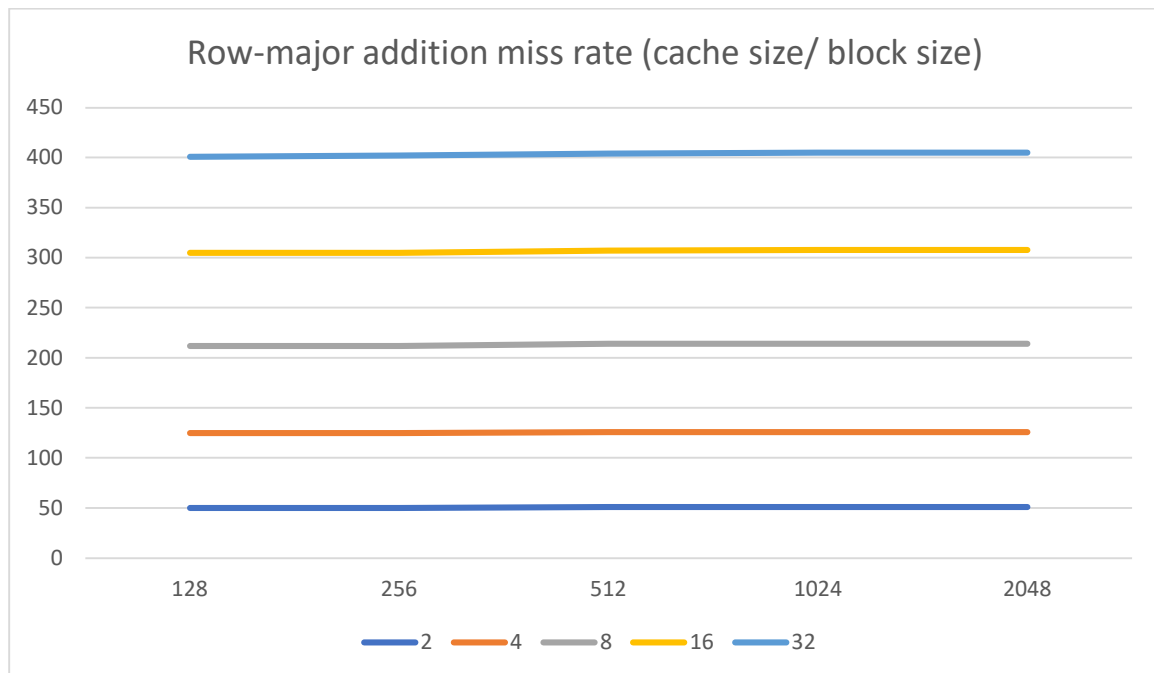


Matrix Size: 75

Block Size Cache Size	2	4	8	16	32
128	Hit Rate: 52 # of misses: 5845	Hit Rate: 76 # of misses: 2929	Hit Rate: 87 # of misses: 1518	Hit Rate: 93 # of misses: 823	Hit Rate: 96 # of misses: 506
256	Hit Rate: 52 # of misses: 5811	Hit Rate: 76 # of misses: 2911	Hit Rate: 87 # of misses: 1501	Hit Rate: 93 # of misses: 807	Hit Rate: 96 # of misses: 470
512	Hit Rate: 52 # of misses: 5768	Hit Rate: 76 # of misses: 2897	Hit Rate: 87 # of misses: 1482	Hit Rate: 93 # of misses: 782	Hit Rate: 96 # of misses: 438
1024	Hit Rate: 53 # of misses: 5738	Hit Rate: 76 # of misses: 2878	Hit Rate: 88 # of misses: 1467	Hit Rate: 94 # of misses: 756	Hit Rate: 97 # of misses: 402
2048	Hit Rate: 53 # of misses: 5717	Hit Rate: 76 # of misses: 2862	Hit Rate: 88 # of misses: 1443	Hit Rate: 94 # of misses: 731	Hit Rate: 97 # of misses: 377

Matrix Size: 150

Block Size Cache Size	2	4	8	16	32
128	Hit Rate: 50 # of misses: 22865	Hit Rate: 75 # of misses: 11443	Hit Rate: 87 # of misses: 5823	Hit Rate: 93 # of misses: 3040	Hit Rate: 96 # of misses: 1705
256	Hit Rate: 50 # of misses: 22812	Hit Rate: 51 # of misses: 11410	Hit Rate: 87 # of misses: 5786	Hit Rate: 93 # of misses: 3002	Hit Rate: 97 # of misses: 1620
512	Hit Rate: 51 # of misses: 22756	Hit Rate: 51 # of misses: 11382	Hit Rate: 88 # of misses: 5741	Hit Rate: 93 # of misses: 2967	Hit Rate: 97 # of misses: 1572
1024	Hit Rate: 51 # of misses: 22701	Hit Rate: 54 # of misses: 11365	Hit Rate: 88 # of misses: 5717	Hit Rate: 94 # of misses: 2912	Hit Rate: 97 # of misses: 1499
2048	Hit Rate: 51 # of misses: 22655	Hit Rate: 75 # of misses: 11331	Hit Rate: 88 # of misses: 5694	Hit Rate: 94 # of misses: 2878	Hit Rate: 97 # of misses: 1476



Part 2

	B: 2 C: 128 M:150	B: 4 C: 2048 M:150	B: 32 C: 2048 M:150
Direct Mapped	Hit Rate: 50 # of misses: 22865	Hit Rate: 75 # of misses: 11331	Hit Rate: 97 # of misses: 1476
Full - LRU	Hit Rate: 50 # of misses: 22865	Hit Rate: 76 # of misses: 11285	Hit Rate: 97 # of misses: 1414
Full - Random	Hit Rate: 50 # of misses: 22860	Hit Rate: 75 # of misses: 11329	Hit Rate: 97 # of misses: 1447

Part 3

Cache Size Set Size	B: 4 C: 2048 M:150	B: 32 C: 2048 M:150
4	Hit Rate: 76 # of misses: 11285	Hit Rate: 97 # of misses: 1414
8	Hit Rate: 76 # of misses: 11285	Hit Rate: 97 # of misses: 1414
16	Hit Rate: 76 # of misses: 11285	Hit Rate: 97 # of misses: 1414