Table 1: Row Major / Direct Mapped Cache / N = 61

Block Size	1	2	4	8	16
Cache Size					
128	Miss Rate: %91	Miss Rate: %89	Miss Rate: %89	Miss Rate: %88	Miss Rate: %88
	Miss Count: 3924	Miss Count: 3856	Miss Count: 3823	Miss Count: 3805	Miss Count: 3796
256	Miss Rate: %91	Miss Rate: %89	Miss Rate: %89	Miss Rate: %88	Miss Rate: %88
	Miss Count: 3924	Miss Count: 3856	Miss Count: 3823	Miss Count: 3805	Miss Count: 3796
512	Miss Rate: %91	Miss Rate: %89	Miss Rate: %89	Miss Rate: %88	Miss Rate: %88
	Miss Count: 3923	Miss Count: 3856	Miss Count: 3822	Miss Count: 3805	Miss Count: 3796
1024	Miss Rate: %91	Miss Rate: %89	Miss Rate: %88	Miss Rate: %88	Miss Rate: %88
	Miss Count: 3921	Miss Count: 3854	Miss Count: 3821	Miss Count: 3805	Miss Count: 3796
2048	Miss Rate: %48	Miss Rate: %46	Miss Rate: %52	Miss Rate: %54	Miss Rate: %74
	Miss Count: 2024	Miss Count: 1994	Miss Count: 2231	Miss Count: 2350	Miss Count: 3178

Table 2: Column Major / Direct Mapped Cache / N = 61

Block Size	1	2	4	8	16
Cache Size					
128	Miss Rate: %91	Miss Rate: %45	Miss Rate: %23	Miss Rate: %11	Miss Rate: %6
	Miss Count: 3862	Miss Count: 1934	Miss Count: 971	Miss Count: 488	Miss Count: 248
256	Miss Rate: %91	Miss Rate: %45	Miss Rate: %23	Miss Rate: %11	Miss Rate: %6
	Miss Count: 3862	Miss Count: 1934	Miss Count: 971	Miss Count: 488	Miss Count: 248
512	Miss Rate: %91	Miss Rate: %45	Miss Rate: %23	Miss Rate: %11	Miss Rate: %6
	Miss Count: 3862	Miss Count: 1934	Miss Count: 971	Miss Count: 488	Miss Count: 248
1024	Miss Rate: %91	Miss Rate: %45	Miss Rate: %23	Miss Rate: %11	Miss Rate: %6
	Miss Count: 3862	Miss Count: 1934	Miss Count: 971	Miss Count: 488	Miss Count: 248
2048	Miss Rate: %91	Miss Rate: %45	Miss Rate: %23	Miss Rate: %11	Miss Rate: %6
	Miss Count: 3862	Miss Count: 1934	Miss Count: 971	Miss Count: 488	Miss Count: 248

Table 3: Row Major / Direct Mapped Cache / N = 122

Block Size	1	2	4	8	16
Cache Size					
128	Miss Rate: %97				
	Miss Count: 15148	Miss Count: 15080	Miss Count: 15047	Miss Count: 15029	Miss Count: 15020
256	Miss Rate: %97				
	Miss Count: 15148	Miss Count: 15080	Miss Count: 15047	Miss Count: 15029	Miss Count: 15020
512	Miss Rate: %97	Miss Rate: %88	Miss Rate: %97	Miss Rate: %97	Miss Rate: %97
	Miss Count: 15148	Miss Count: 13395	Miss Count: 15047	Miss Count: 15029	Miss Count: 15010
1024	Miss Rate: %97	Miss Rate: %49	Miss Rate: %87	Miss Rate: %97	Miss Rate: %97
	Miss Count: 15148	Miss Count: 7514	Miss Count: 13367	Miss Count: 15029	Miss Count: 14896
2048	Miss Rate: %30	Miss Rate: %49	Miss Rate: %75	Miss Rate: %86	Miss Rate: %97
	Miss Count: 6087	Miss Count: 7514	Miss Count: 11501	Miss Count: 13113	Miss Count: 14774

Table 4: Column Major / Direct Mapped Cache / N = 122

Block Size	1	2	4	8	16
Cache Size					
128	Miss Rate: %30	Miss Rate: %17	Miss Rate: %9	Miss Rate: %5	Miss Rate: %3
	Miss Count: 314	Miss Count: 98	Miss Count: 53	Miss Count: 29	Miss Count: 18
256	Miss Rate: %30	Miss Rate: %17	Miss Rate: %9	Miss Rate: %5	Miss Rate: %3
	Miss Count: 314	Miss Count: 98	Miss Count: 53	Miss Count: 29	Miss Count: 18
512	Miss Rate: %30	Miss Rate: %17	Miss Rate: %9	Miss Rate: %5	Miss Rate: %3
	Miss Count: 314	Miss Count: 98	Miss Count: 53	Miss Count: 29	Miss Count: 18
1024	Miss Rate: %30	Miss Rate: %17	Miss Rate: %9	Miss Rate: %5	Miss Rate: %3
	Miss Count: 314	Miss Count: 98	Miss Count: 53	Miss Count: 29	Miss Count: 18
2048	Miss Rate: %30	Miss Rate: %17	Miss Rate: %9	Miss Rate: %5	Miss Rate: %3
	Miss Count: 314	Miss Count: 98	Miss Count: 53	Miss Count: 29	Miss Count: 18

## **Table 5 – For N = 61**

	Poor Hit Rate	Medium Hit Rate	Good Hit Rate
	Block Size = 1	Block Size = 16	Block Size = 1
	Cache Size = 128	Cache Size = 2048	Cache Size = 2048
Direct Mapped	Miss Rate: %91	Miss Rate: %74	Miss Rate: %48
	Miss Count: 3924	Miss Count: 3178	Miss Count: 2024
Fully Associative (LRU)	Miss Rate: %88	Miss Rate: %79	Miss Rate: %50
	Miss Count: 3793	Miss Count: 6833	Miss Count: 2224
Fully Associative (Random)	Miss Rate: %91	Miss Rate: %70	Miss Rate: %44
	Miss Count: 3924	Miss Count: 3040	Miss Count: 1874

## **Table 5- For N = 122**

	Poor Hit Rate	Medium Hit Rate	Good Hit Rate
	Block Size = 2	Block Size = 4	Block Size = 2
	Cache Size = 128	Cache Size = 2048	Cache Size = 2048
Direct Mapped	Miss Rate: %97	Miss Rate: %75	Miss Rate: %49
	Miss Count: 15080	Miss Count: 11501	Miss Count: 7514
Fully Associative (LRU)	Miss Rate: %97	Miss Rate: %40	Miss Rate: %50
	Miss Count: 30157	Miss Count: 12520	Miss Count: 7698
Fully Associative (Random)	Miss Rate: %97	Miss Rate: %56	Miss Rate: %55
	Miss Count: 15078	Miss Count: 8632	Miss Count: 17190

## Table 6 – For N = 61

N-Way Set Size	Poor Hit Rate	Medium Hit Rate	Good Hit Rate
	Block Size = 1	Block Size = 16	Block Size = 1
	Cache Size = 128	Cache Size = 2048	Cache Size = 2048
4	Miss Rate: %91	Miss Rate: %88	Miss Rate: %80
	Miss Count: 3924	Miss Count: 3794	Miss Count: 3679
8	Miss Rate: %91	Miss Rate: %88	Miss Rate: %80
	Miss Count: 3924	Miss Count: 3794	Miss Count: 3679
16	Miss Rate: %91	Miss Rate: %88	Miss Rate: %80
	Miss Count: 3924	Miss Count: 3794	Miss Count: 3679

## **Table 5- For N = 122**

N-Way Set Size	Poor Hit Rate	Medium Hit Rate	Good Hit Rate
	Block Size = 2	Block Size = 4	Block Size = 2
	Cache Size = 128	Cache Size = 2048	Cache Size = 2048
4	Miss Rate: %97	Miss Rate: %75	Miss Rate: %49
	Miss Count: 15080	Miss Count: 11501	Miss Count: 7514
8	Miss Rate: %97	Miss Rate: %75	Miss Rate: %49
	Miss Count: 15080	Miss Count: 11501	Miss Count: 7514
16	Miss Rate: %97	Miss Rate: %75	Miss Rate: %49
	Miss Count: 15080	Miss Count: 11501	Miss Count: 7514