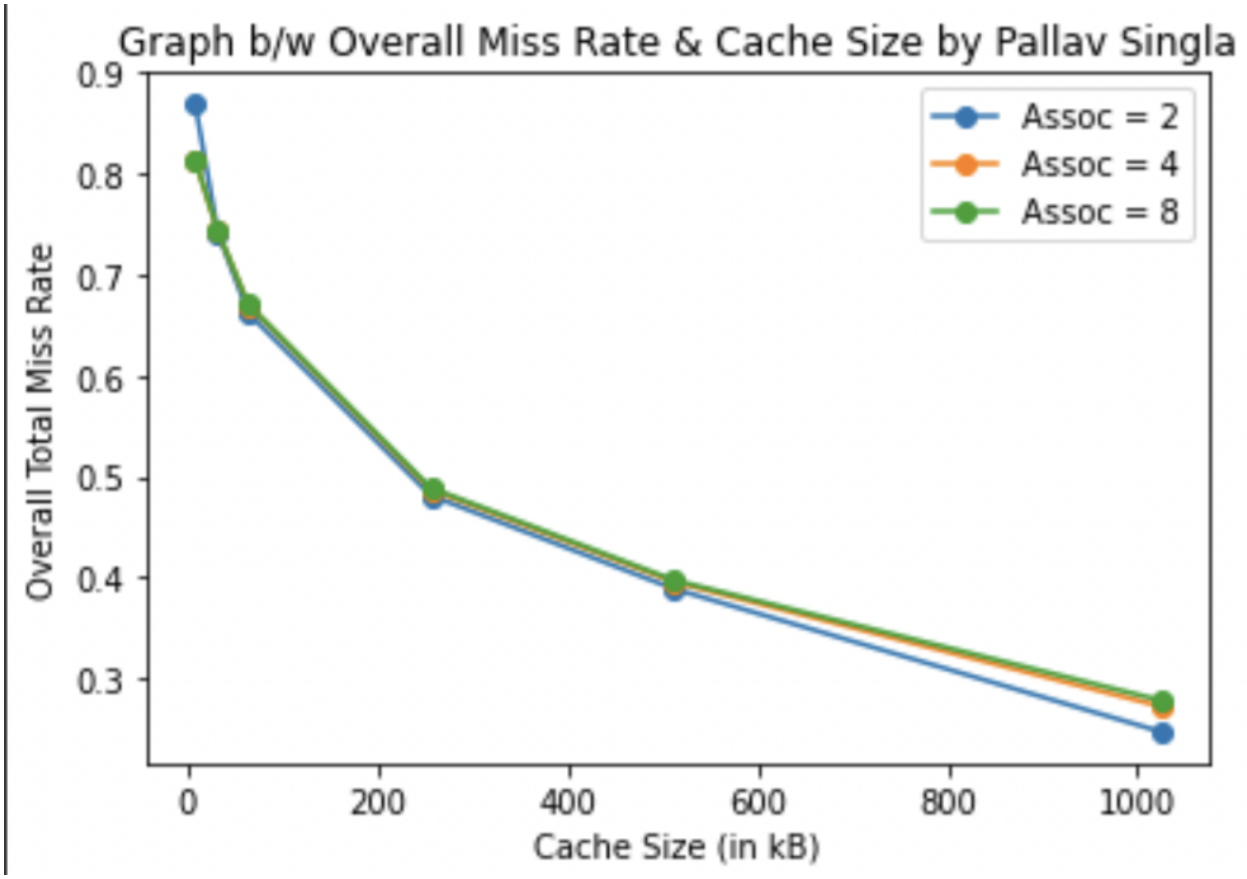
Here I have used the “L2 Cache Overall miss rate(total)” taken from the stats.txt file

a) Here in this, i have observed that when I am increasing the cache size (example: 32kB -> 64kB), then i have seen the overall miss rate of the L2 cache decreased but when I have increased the associativity factor with the same size, then the overall miss Rate of the L2 cache decreased for the lower value of cache sizes or remained the same in few cases and increased(marginally) for higher values of cache size. This we can see from the table as well as from the Graph too. Miss rate increases mean that the hit rate is less and vice versa.
b) As the size of the cache increases, that means the data we can keep in more; therefore, previous data can also come there itself and capacity miss reduces, therefore hit rate increases and miss rate decreases.
c) For set Associativity vs direct map in set Associativity miss rate decreases due to decrease in conflict miss.

Size	Associativity	Miss Rate
256KB	4	0.487071
64KB	2	0.661751
64KB	4	0.669901
256KB	2	0.481197
1024kB	8	0.278419
1024kB	2	0.247329
32kB	4	0.742714
64kB	8	0.670638
32kB	8	0.742714
256kB	8	0.488774
512kB	2	0.388709
512kB	4	0.39549
512kB	8	0.397327
1024kB	4	0.27245
32kB	2	0.740793
8kB	2	0.86898
8kB	4	0.813073
8kB	8	0.813601


Graph b/w Overall Miss Rate & Cache Size by Pallav Singla
Overall Total Miss Rate
Cache Size (in kB)
Assoc = 2
Assoc = 4
Assoc = 8
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0
200
400
600
800
1000