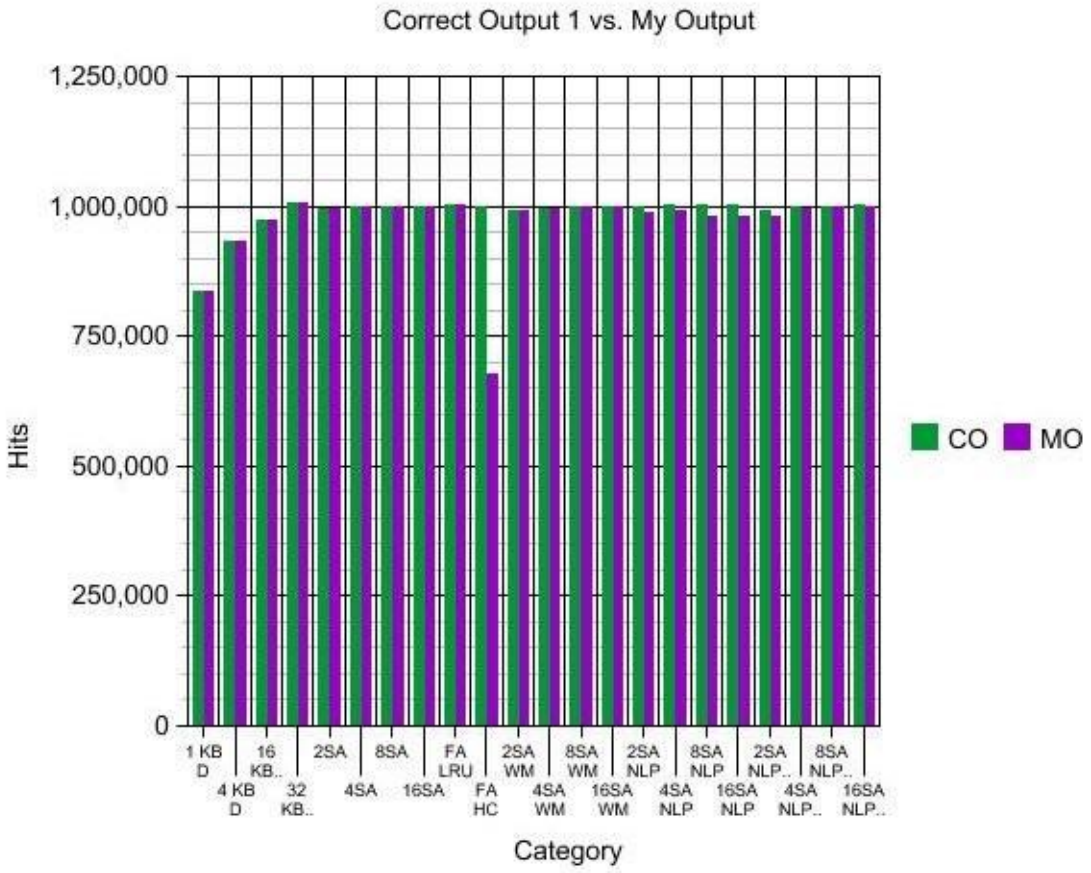
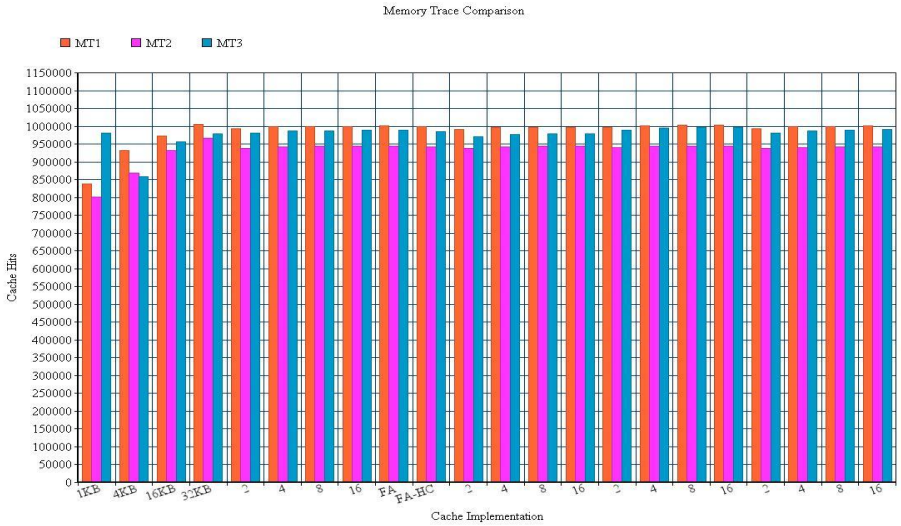
Corey Hom
Report




The graph shows the differences between the correct output and my output, as well as highlighting the differences between all the different implementations of a cache. Some of my output is incorrect, and most are less than the correct output.




It's hard to say which cache performed best. According to the correct results, the best performers, depending on the type of input file you had, was a direct-mapped cache the size of 32 KB or a set-associative cache with next-line prefetching with a set assocativity of 16. Another strong performer was next-line prefetching on a miss. Overall, a direct-mapped cache with a size of 32KB was the best performer, having the most hits in two of the three correct output files. Next-line prefetching on access was the second best, because it had the highest hit rate in one of the three correct output files.

The optimal configuration in a cache would be to have a large size or a high associativity. It seems that the larger the cache is, the higher hit rate you will have.