

Brian Liebe
CS320 – Project 2
Brief Summary of Project
Due: Sunday, December 3rd

1. Direct mapped cache with 32KB caches gave an average ~87% hit rate. Set associative cache with 16 associativity gave an average ~86% hit rate. Fully associative gave an average of ~86% (LRU) and ~86%(LRU approximation). No allocation of write-miss gave an average of ~86%. Next-line pre-fetching gave an average of ~86%. And finally, pre-fetching on a miss gave an average of ~86%. So we may conclude that direct mapping with a large cache gives the best results over multiple programs. All other types were roughly the same, however direct mapped caching with a low cache size was the worst overall.
2. The optimal configuration was the 32KB direct mapped cache for these programs. This gave the highest average hit rate over all three test programs.