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Comp Arch
Assignment4 Readme

The data structure used was an array of sets where each set housed an array of blocks. The set was chosen by comparing the index to the set number so the structure would have the efficiency of a hash table.

It was clear that cacheA had a better hit ratio so it was more efficient. When the address is less than 48 bits, then the most significant bits turn to zero. Since cacheB hashes using the most significant bits, then on the addresses which are less than 40 bits the hash will usually be zero. This will flood the first set in the cache with addresses and increase the number of misses in the cache.