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Project 2

CISC360

It is clear that the Two-Way Set Associative is better in the first test, as locality is extreme in that example. This is because there are two places each memory location could have been rather than one, causing memory to be missed less, versus the direct mapped cache with only one place for each main memory spot. In the second example, Set Associative is slightly worse, as we’re writing to only a few memory locations several times, and thus the cost of checking a few locations to find out memory address outweighs the direct mapped slightly. This gap can be seen more when cache sizes increase, bringing more of a gap between the direct mapped and the set associative in such a case.