Invert the j, k loops and run again, comparing the execution time (explain reasons for the change).

When I inverted the j, k loops the execution time decreased from 2450 millisecond to 1430 millisecond. It means that the loop improves the performance because of the cache locality in the processor. While inverted loop is executed we hit cache memory more than the main memory hit because the required array data are already stored in the cache memory and main memory.