# Assignment 4 (Parallel Sorting)

Conclusion:

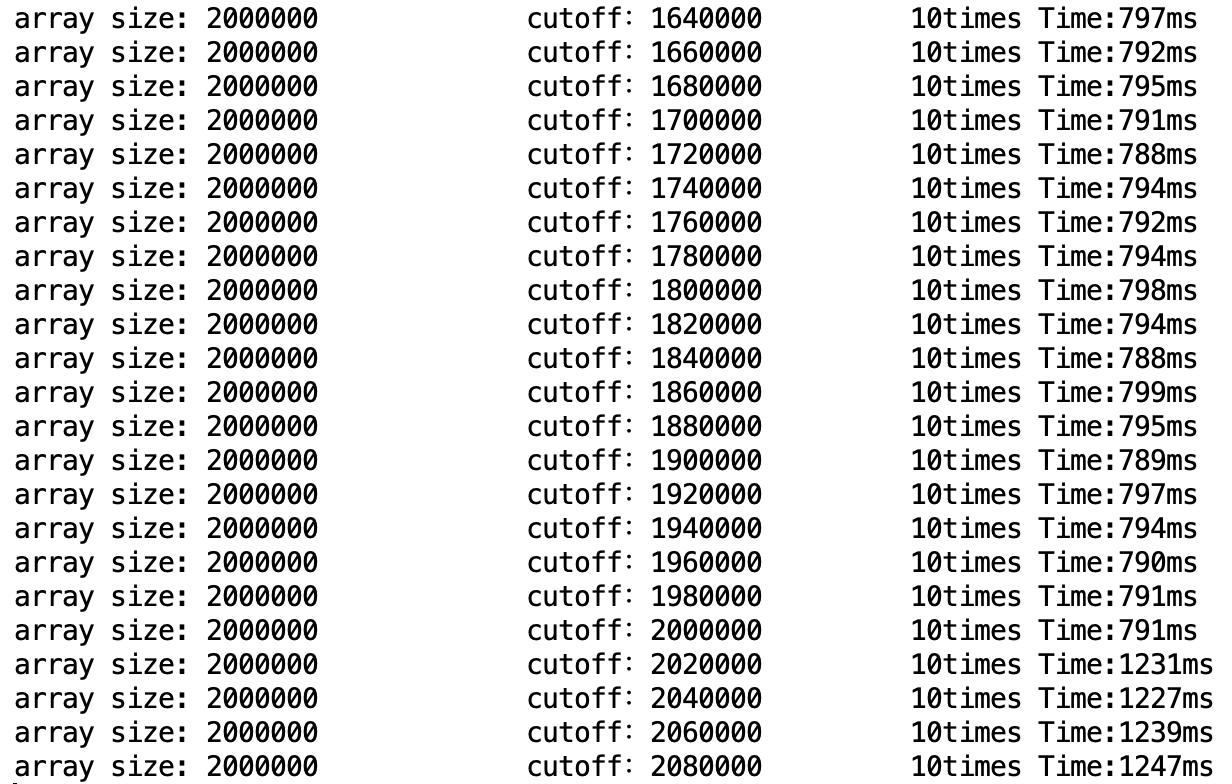
When cutoff < array size, parallel sort is more efficient than system sort;

Number of thread influence parallel sort performance / relationship similar to cos(x)

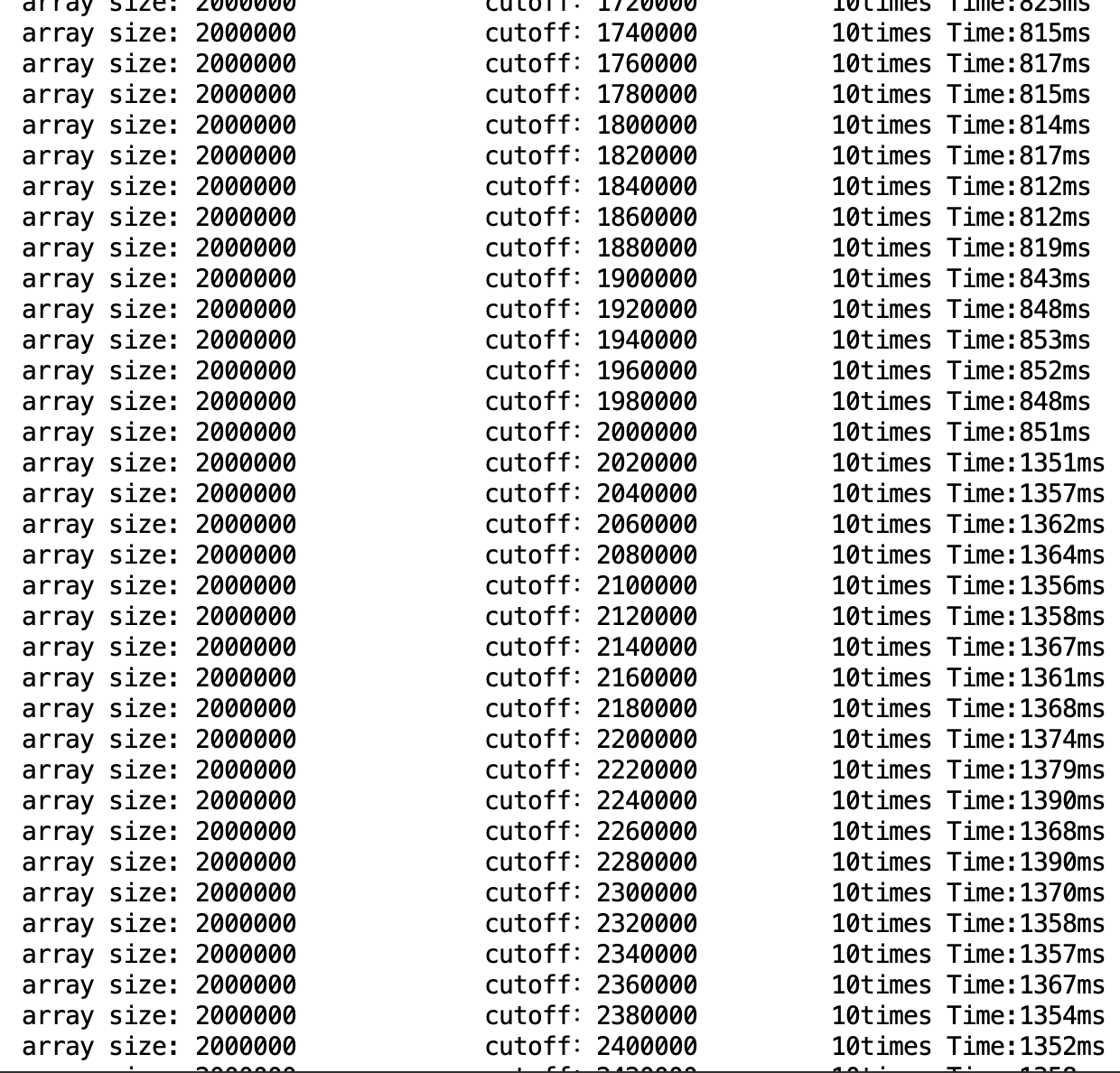
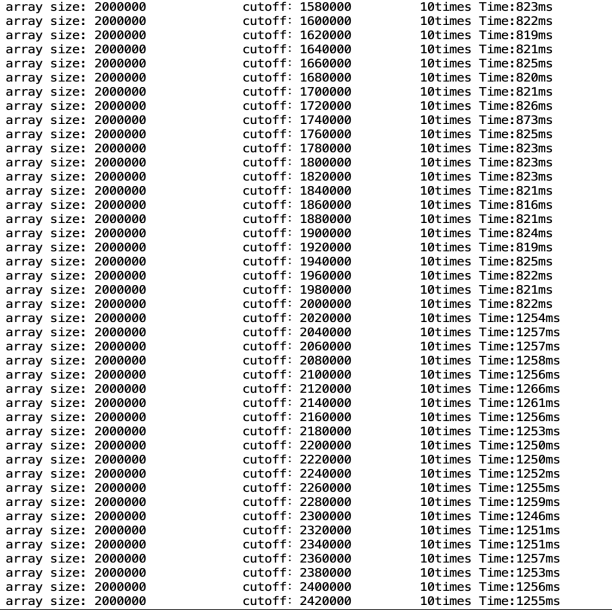
Result:

When Array size unchanged and is 2000000

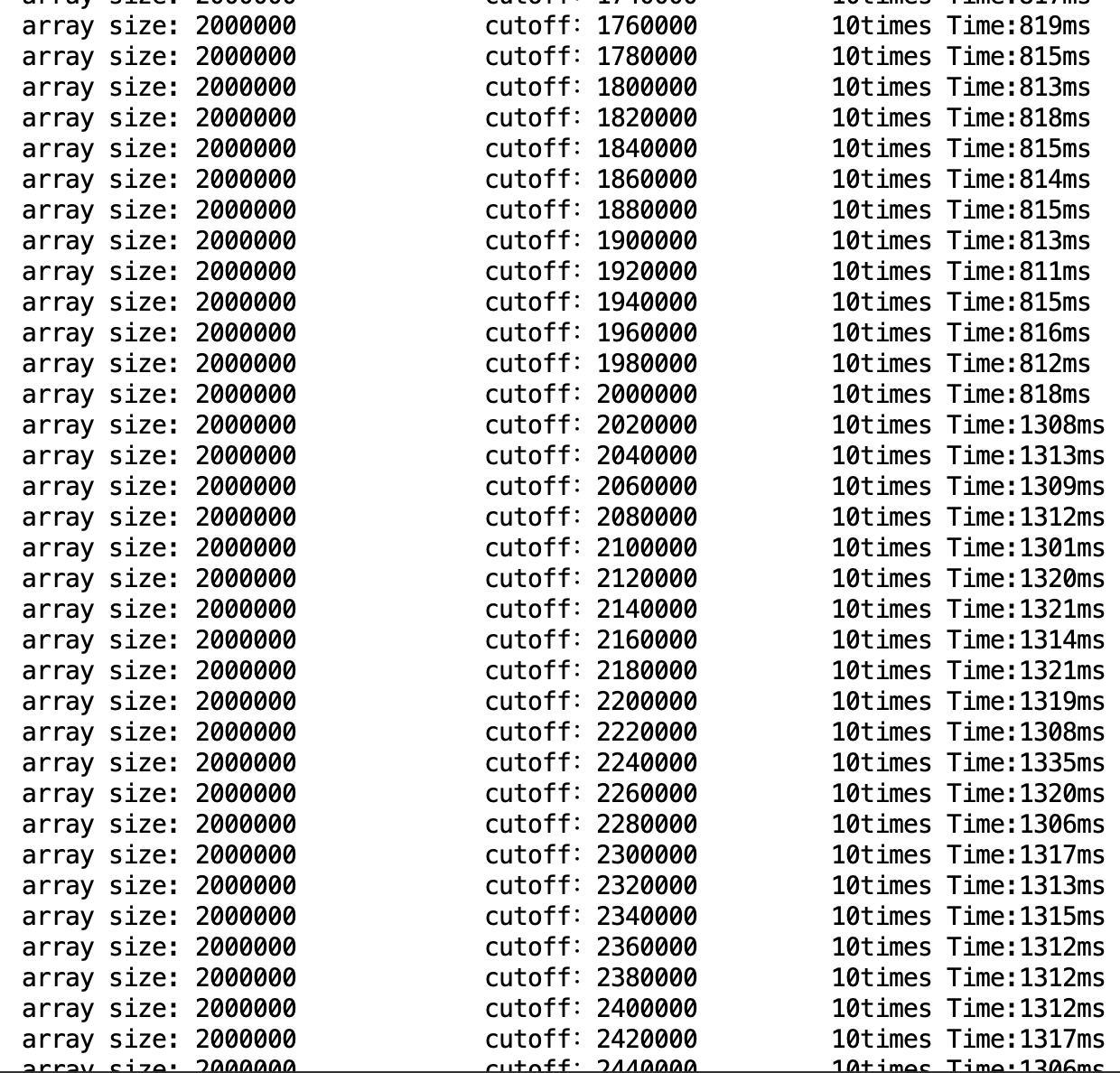
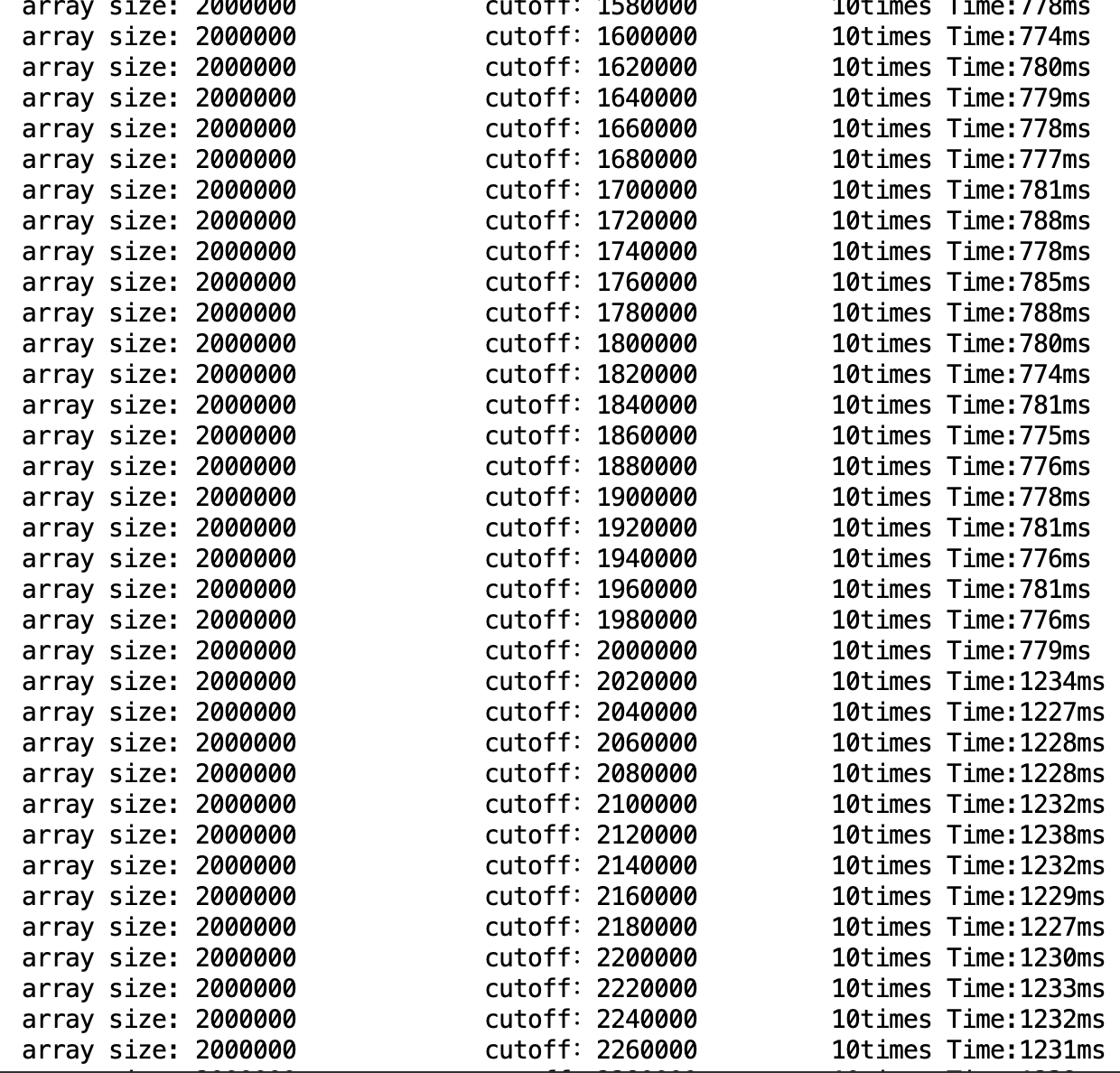
**when number of threads is 4:**

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**when number of threads is 8: When number of threads is 16:**

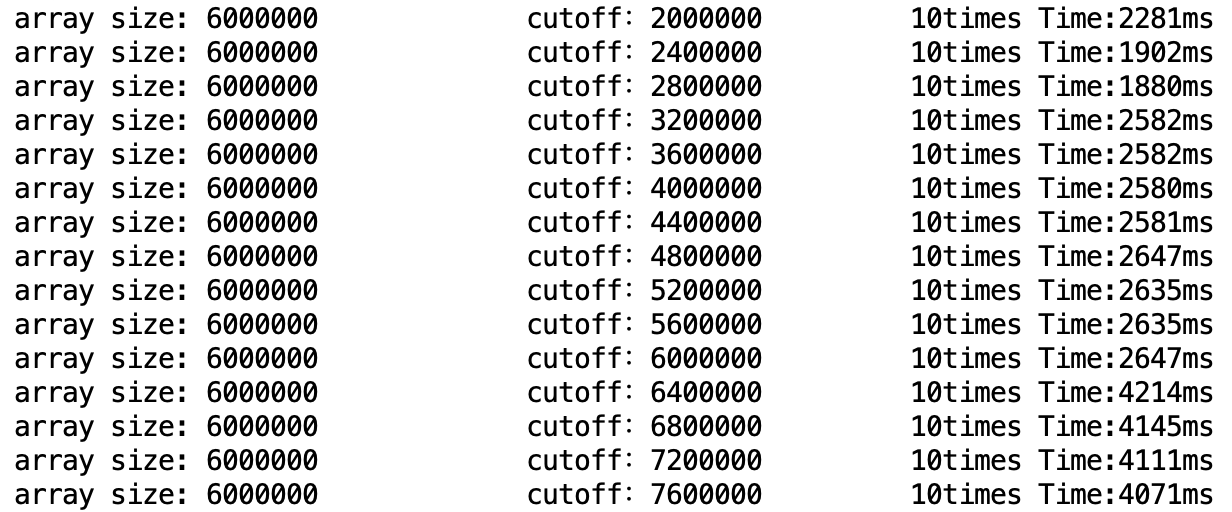


**When number of threads is 128:** **When thread count is 512:**

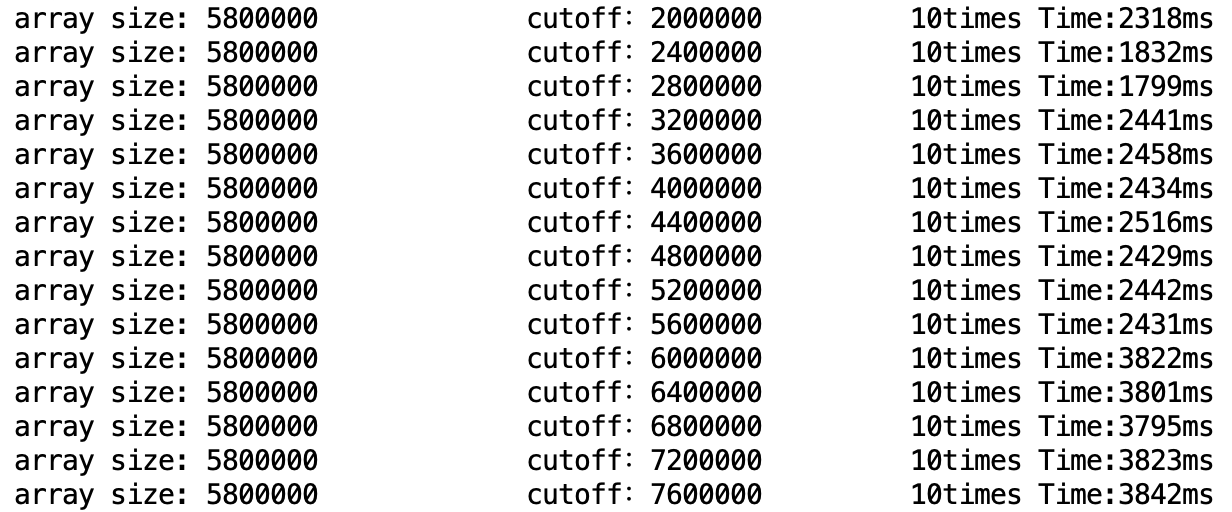


When number of threads is 128:

When array size is 6000000:



When array size is 5800000:



When array size is 3100000:

