

Col730 Assignment2

Merge Sort : In Merge sort we just make 2 tasks for recursive function and divided the threads till threads =1. Then the left data will be sorted sequentially.

Quick Sort : In Quick sort also we made slight change in sequential code to parallelize it, we again did partitioned and make recursive calls a task. Also added the threshold size for switching to sequential(experimental choice).

Radix Sort : In Radix sort, We first made histogram parallelly, every threads saving data in local buckets, then using one thread we made cumulative array from histogram. Then one by one threads are called to set the data to global bucket. Then simply used parallelism in for loop to copy data from global bucket return back to original data Array.

Best Sort: Experimentally Radix sort works better than Quick and Merge. So just called Radix as Best.