Chandler Justice - A02313187

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A closer look at OpenMP

- all preprocessor directives must include #pragma omp parallel num_threads(n)
- surround parallel regions in curly braces so OMP does not stop parallelizing prematurely
- can use ”#pragma omp for” to automatically parallelize a for loop already inside of a parallel region
- If the item you want to parallelize is directly below the directive, creating a new scope is not unnecessary
- OMP uses a fork/join model to distribute work, wherein all threads branch (fork) off from a master and then each thread computes its own work, and then the partial work computed by the sums is joined back together into the master thread
- *intrinsic functions:* use printf(”%d”, omp_get_thread_num()) to verify the number of threads you think are running are actually running.
- use omp_get_wtime() to measure the wall clock time. This will account for the fact that multiple threads are running at the same time. Using a traditionl approach to timing the wall time would result in a different time being computed by every thread.