GROUP 72

Members:

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Contribution:

Both of us worked on the assignment together

Implementation:

1. **get_current_time():** Returns the current time using the high-resolution clock.
2. **calculate_time(start, end):** Calculates and returns the elapsed time in microseconds between two time points.
3. **thread_func(arg):** Executed by individual threads in a 1D parallel execution, calling the provided lambda function and measuring the elapsed time.
4. **thread_func_2D(arg):** Executed by individual threads in a 2D parallel execution, calling the provided lambda function and measuring the elapsed time.
5. **parallel_for(low, high, lambda, numThreads):** Implements 1D parallel execution, dividing the range [low, high) among threads, executing the lambda function, and measuring elapsed time.
6. **parallel_for(low1, high1, low2, high2, lambda, numThreads):** Implements 2D parallel execution, dividing the ranges [low1, high1) and [low2, high2) among threads, executing the lambda function, and measuring elapsed time.

Link to Github Repository:
https://github.com/varsha21297/OS_Assignment