Single-threaded CPU Approach:
The time complexity is O(N).
After modifying the original naive CPU implementation to use a single loop, the time complexity is reduced to O(N). For the initial version with two nested loops, it had a time complexity of O(N^2).

Naive GPU Approach:
The time complexity is O(N^2).
Although the algorithm itself has a time complexity of O(N), utilizing N threads leads to a total time complexity of O(N^2).

Recursive Doubling GPU Approach:
The time complexity is O(N log N).
The algorithm's complexity is O(log N), and with N threads, the overall time complexity becomes O(N log N).