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Project 2 MPI Writeup

I used MPI_Allgather when using the collection of the sum comparison since that would allow all processes to send the information to each other by floating point values with a simple counter to check that if it sent to itself, it would not set itself as the best image.

I mainly used MPI_Isend since values did not change after it solved its portion of information. Since there weren't any particular bottlenecks, Immediate sends worked in all places.

For receiving, the blocking receive was needed since all of the data needed to be compared to each other in order to find the best difference between them.

Finally, I used MPI_Gather (different from Allgather) where the call simply needed to be sent to the root process to display the information to the screen as having all processes do them would have been repeating unnecessarily.