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Sub: Computer Algorithm

Assignment 3

Observation:

- In distributed memory, message passing interfaces (MPIs) facilitate communication between multiple computers running parallel programs.
- Parallel computing involves multiple computers or even multiple processor cores within the same computer - called nodes.
- It is common for each node of the parallel arrangement to focus on a specific portion of the overall computing problem.
- In this case, the task is to synchronize the actions of all parallel nodes, exchange data between nodes, and provide command and control over all of the parallel nodes.
- There is a standard suite of functions for these tasks in the message passing interface. By definition, message passing is the act of sending a message to an object, parallel process, subroutine, function, or thread, which then starts another process.
- 1. Here in given example we have is one head office and different branches
- 2. Every branch send data to head office everyday and they receive calculated data from head office
- 3. But using MPI we can do this sending and receiving process parallely which will be more efficient.
- 4. One branch sends the data that is to be calculated and the head office sends the calculated amount with tax to the branch.
- 5. So we can observe that there are two times when sending and receiving is going on.