

Quiz 3 (deadline: Tuesday 15 October 2024, 8:45 AM)

1. In what situation will the use of asynchronous communication be advantageous? Is there an additional complication for your parallel program?
2. Assume that the $n \times n$ matrices A and B are initially in the same processor.
 c and τ are the time of 1 calculation and communication of 1 number respectively.
What is A+B's data locality ratio when the work (calculations) is evenly distributed among p processors? Can you think of an efficient parallel implementation of this A+B?
3. MPI_Send and MPI_Recv are blocking communications, however, when two processes try to send a message to each other simultaneously, the program does not always run into a deadlock, why?