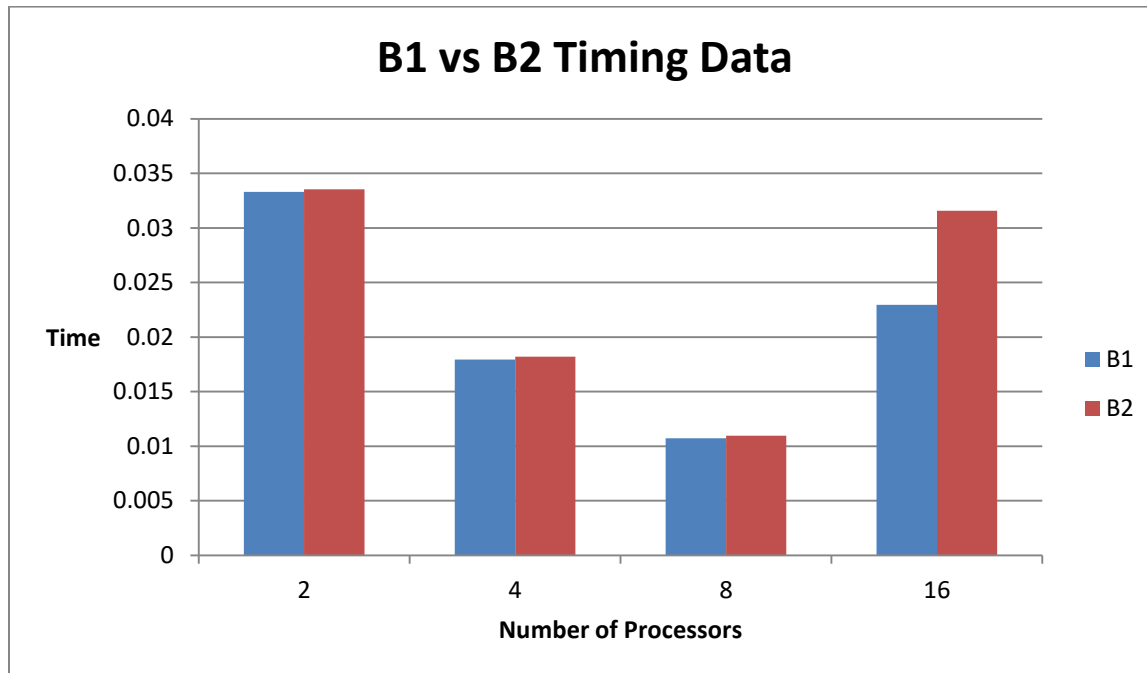


Timing



1. MPI_Reduce is called with a root process of 0. The numbers on each process are summed to the result receive buffer and the root process stores that buffer.
2. Runtime is dependent on the size of the ring. With a larger ring size there is a greater communication delay because bandwidth is shared.
3. According to my data, ring topology is slower every time.
4. In a ring topology, number of messages passed are at least equal to the number of processes.