Q4 : MPI on Millions of Cores

- <u>It Positively impact our ability to fully exploit parallelism on millions of cores</u>. As

1) Communication that is more rapid (improved interconnects) lowers the time it takes for information to spread

2) Effective communication protocols that minimize communication overhead by reducing end-to-end latency.

3) Larger cache sizes - enables for more data to be stored and accessible quickly, reducing the chances of a cache miss causing delays.

4) Improved "many core architectures" and programming paradigms allow for more efficient utilization of cores (lower parallel programming overhead).