

1. Compare performance at 16 threads across the different synchronization modes. Why are the speedup this way?

For the iteration, chunk and thread level synchronizations we can see that performance is slowly decreasing as granularity increases. This could be happening because of more than ideal number of threads are working at a time. There is a loss in management overhead since too many threads are trying to access the mutexes.

2. For thread level synchronization, compare the performance at 16 threads of different n and intensity. Why are the plots this way?

In thread level synchronization the graph for 16 threads is climbing up gradually as soon as both n and intensity increases. This is happening because most of the 16 threads receive more work and less idle time, hence more utilization of threads occur against maximum number of n and intensity.