

Name: Shreyas Shrikant Kamble

PRN: 22610046

Observation.

Performance is improved with increased threads
1thread. Average time = 8.8844s, 2thread, average time = 5.57
3thread average time = 4.0522s, 4thread average time = 3.33s

The average time significantly decreases as the number of threads increases from 1 to 4, indicating effective parallelization and better CPU utilization.

Beyond 4 threads, the reduction in execution time is less pronounced. The performance improvement starts to diminish, suggesting that the system is approaching its optimal parallel processing capability.

The average time increases when using 8 threads compared to 7 threads.

Matrix multiplication benefits from parallelization, with the most significant gain seen up to 4 threads. Beyond this point, adding more threads results in diminishing returns and using 8 threads can lead to slight performance degradation due to overhead.