

Left Graph: Average Waiting Time vs n

As threads increase, TAS and CAS average wait times grow linearly, showing reduced efficiency. B.CAS maintains a consistently low average wait, demonstrating superior scalability. This indicates B.CAS handles concurrent access far better, minimizing delays and ensuring faster access for all threads, even under heavy load.

Right Graph: Average Worst Case Time vs n

Mirroring the average wait, TAS and CAS worst-case waits also grow linearly with more threads, implying potential unfairness. B.CAS keeps worst-case waits consistently low, regardless of thread count. This highlights B.CAS's ability to provide fair and consistent performance, preventing excessive delays for any single thread.

Additionally, a zip file has been included in the submission containing these files



- 1. inp-params.txt contains the input parameters for the programme
- 2. the three files ending with "Output.txt" contain the logs generated for the three locking algorithms by the programme.
- 3. terminal-logs file contains the output average waiting time and worst case time for each run of the programme. It is on the basis of the data in this file that the graphs have been generated.