

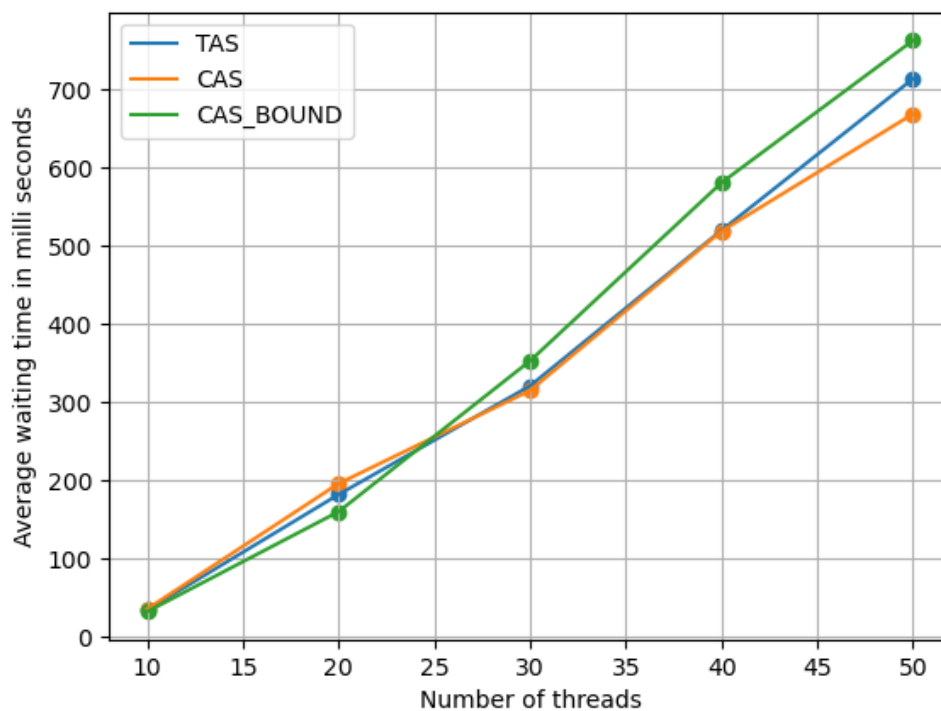
OS-2 OPERATING SYSTEMS (CS3523)

PROGRAMMING ASSIGNMENT 3

Implementation of TAS, CAS and Bounded Waiting with CAS.

REPORT :

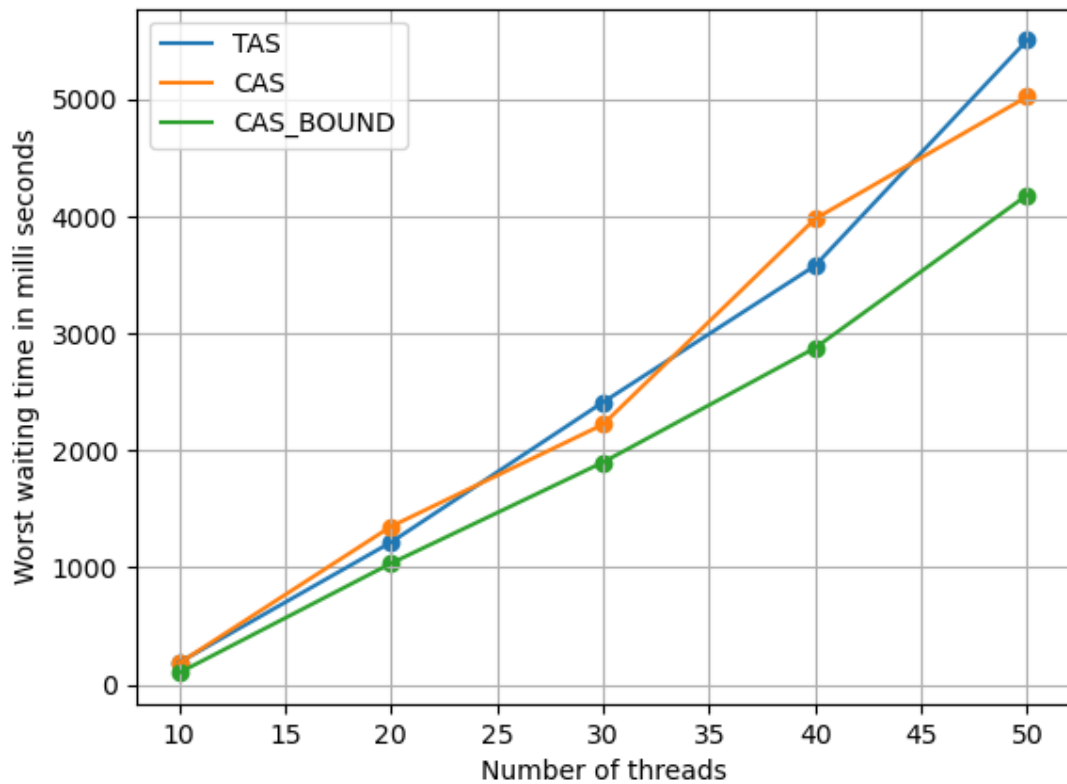
I. Graph on Average time taken to Enter CS:



Observation and Comparison:

- for lower value of threads, waiting time for TAS, CAS, Bounded CAS have almost similar.
- Average waiting time by TAS, CAS are almost similar for threads from 10 to 50.
- Average waiting by Bounded CAS is a bit Higher than rest 2 for more number of threads
- This, could be understood as Bounded CAS would try to ensure less worst waiting time for each request to Critical Section
- Thus waiting time would increase implies Average time would also increase

II. Graph on Worst time taken to Enter CS:



Observation and Comparison:

- We could observe that CAS and TAS have similar Worst time for all threads from 10 to 50.
- Bounded CAS have less worst waiting time when compared to CAS and TAS.
- This could be understood as implementation of Bounded CAS implies no starvation would occur across all processes. Therefore maintaining waiting buffer will give opportunity to all process in queue waiting to enter Critical Section.
- That directly implies worst waiting time for Bounded CAS will have low value.