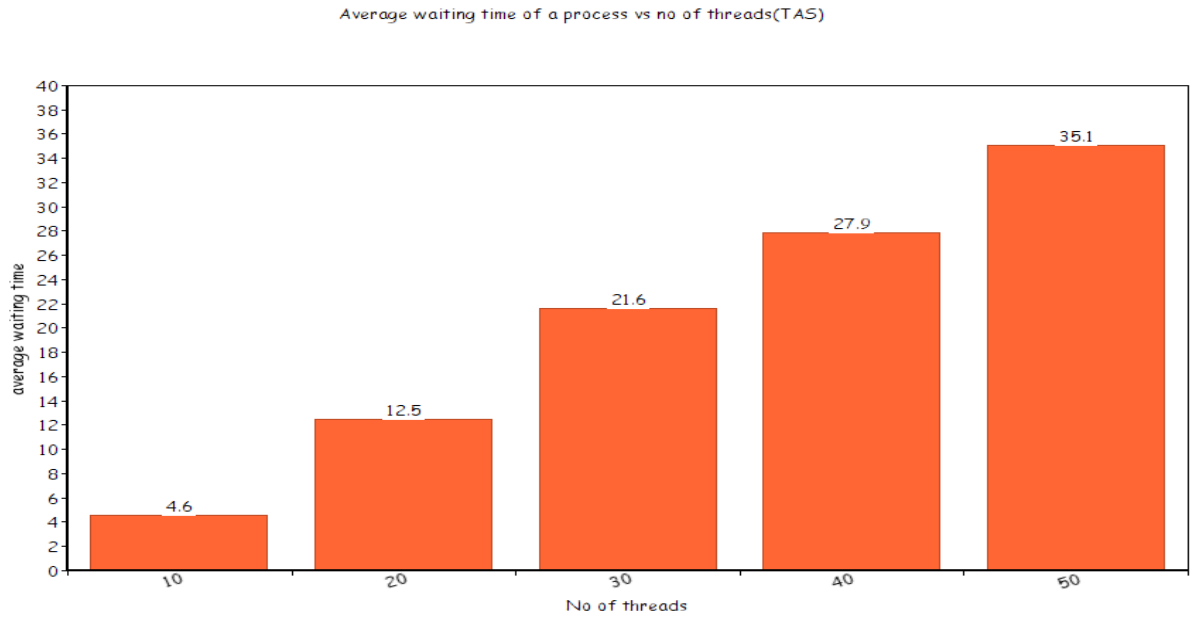
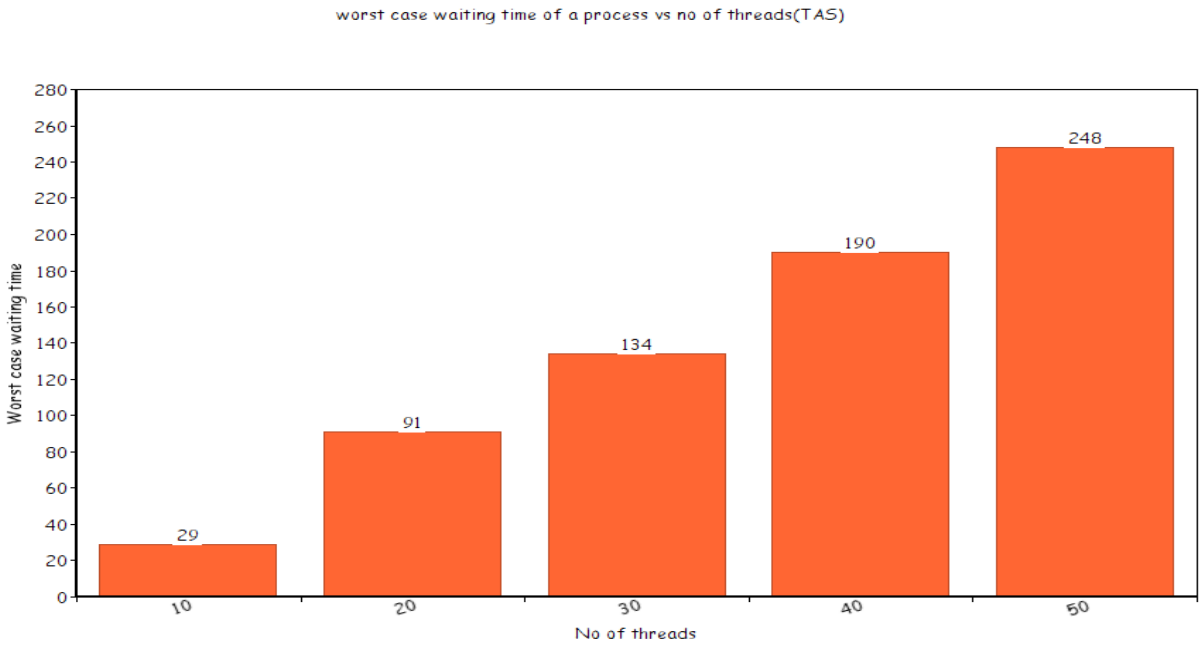
OS REPORT PROG ASSIGNMENT 4

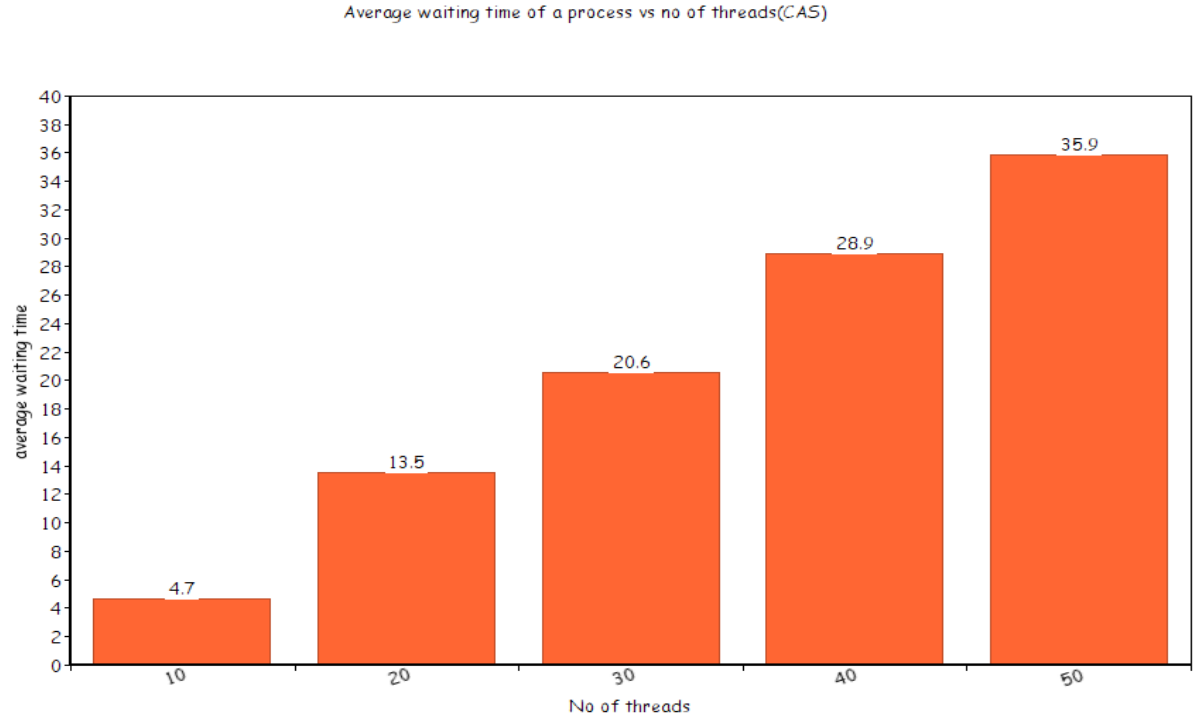
Average waiting time Graph of TAS:



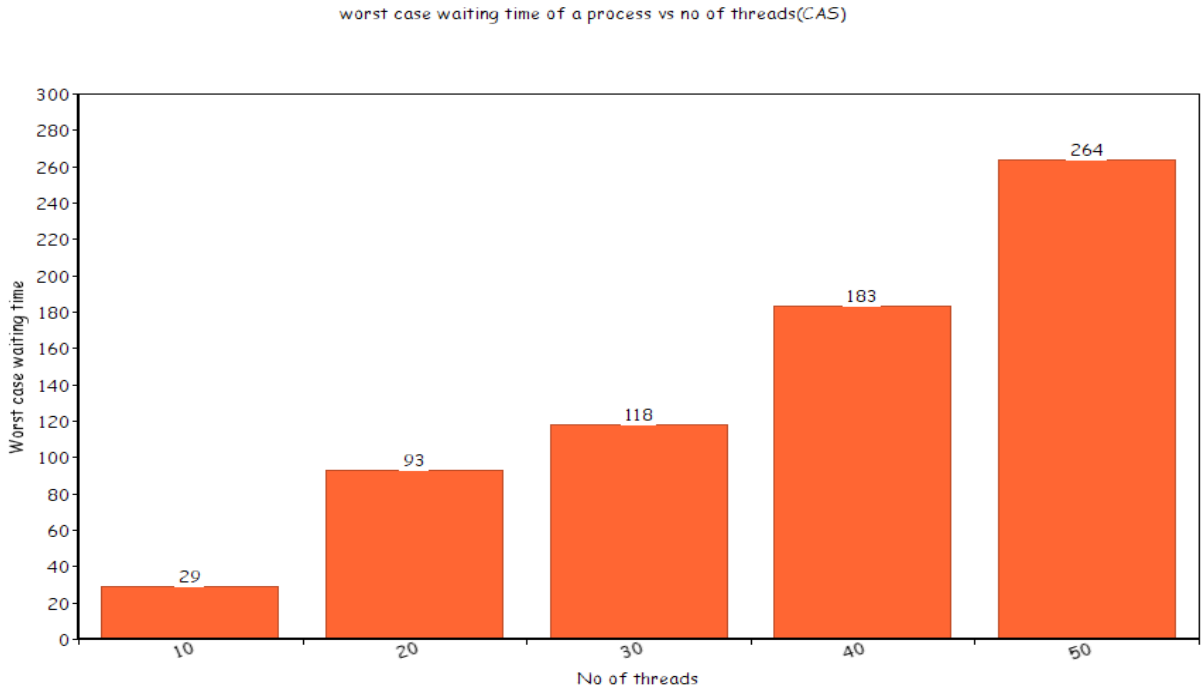
Worst case waiting time graph of TAS:



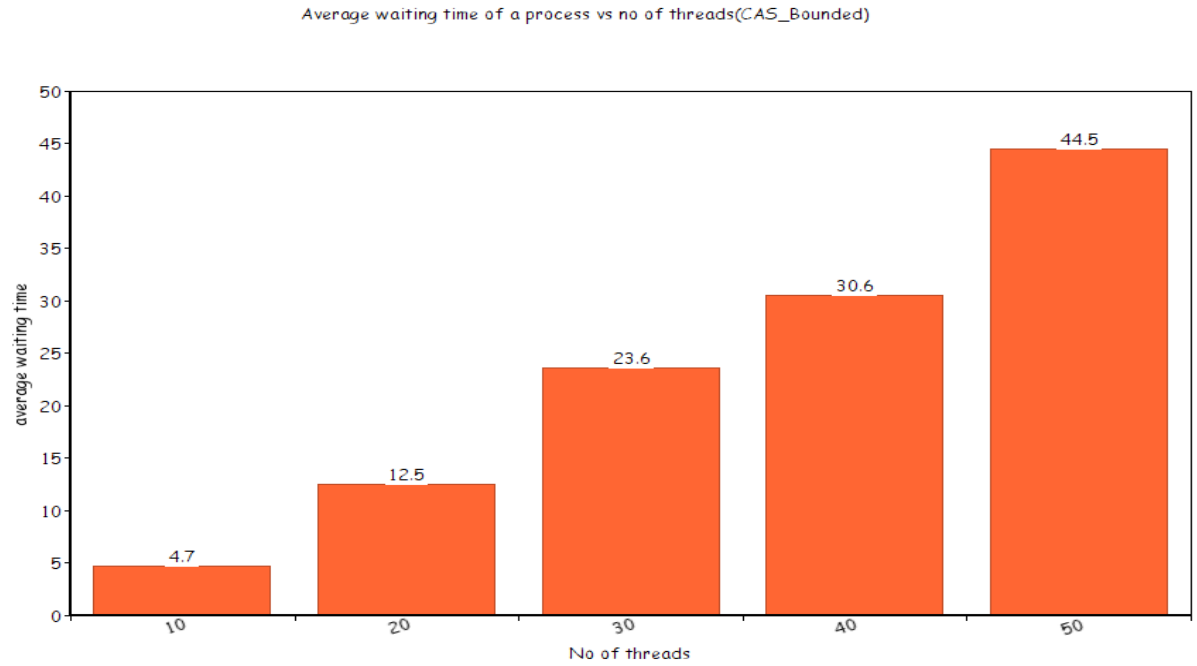
Average waiting time graph of CAS:



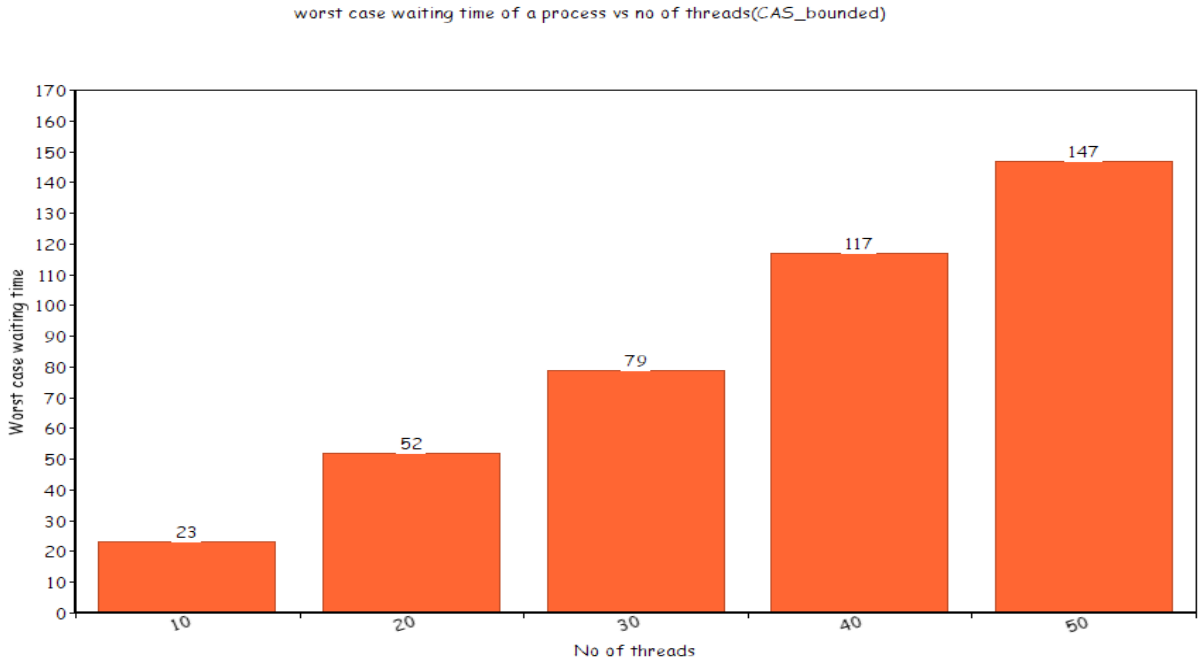
Worst case waiting time graph of CAS:



Average waiting time graph of CAS-Bounded:



Worst case waiting time graph of CAS-Bounded:



Analysis:

1. For all the above graphs I took lambda1(average time in critical section) and lambda2(average time in remainder section) values as 1 and 2 respectively.
2. From the above graphs we can see that the average waiting of TAS,CAS and CAS_Bounded is almost the same.It increases with increase in no of threads since there is more competition for a thread to enter the critical section. Another notable point is the average waiting time of CAS_Bounded is slightly bigger than the other two for more no of threads.
3. But the worst case waiting time of CAS_bounded differs greatly from TAS and CAS. TAS and CAS have nearly the same worst case waiting times and their values are much larger than those of CAS_Bounded.
4. It is because CAS_bounded prevents a process from starving while TAS,CAS don't.Also worst case waiting times of all three algorithms increase with increase in no of threads.