Report

ES15BTECH11002

Design:

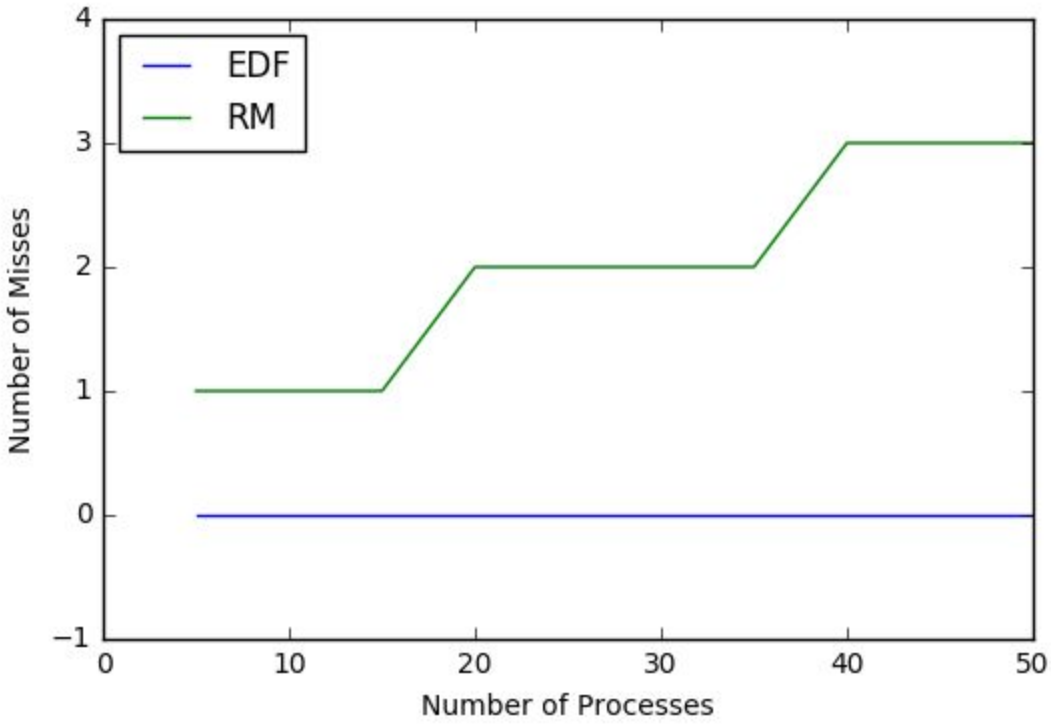
I have simulated both the scheduling algorithms in a real time basis. That is as time progresses, the algorithm checks any change in the queue and rearranges the processes if need be.

There were no complications as such which arose while programming the RM scheduling algorithm.

There was a slight issue while programming EDF scheduling though. The deadlines change after the completion of each process and the priorities change thereby.

Graphs:

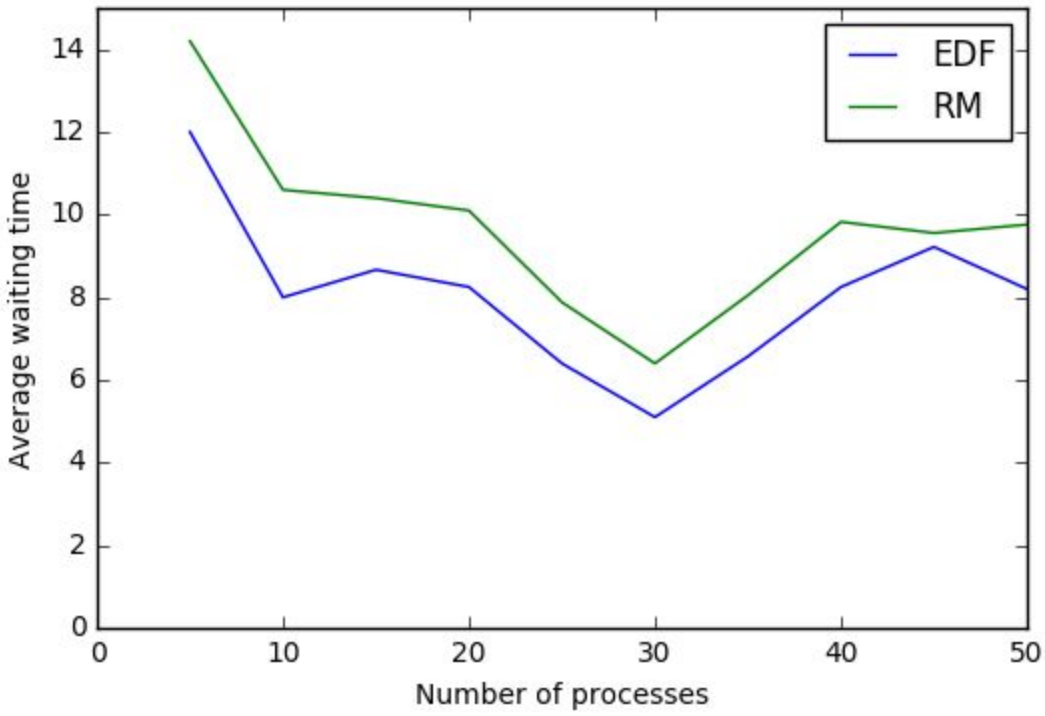
Deadlines Missed vs Number of processes



For the given input, there were no misses while scheduling with EDF algorithm.

The misses gradually increase while scheduling with the RM algorithm.

Average waiting time vs Number of processes



The average waiting time while scheduling with both the algorithms seem to follow the same trend.

The average waiting time when scheduling through EDF algorithm appears to be lower than that of RM scheduling algorithm.

Analysis:

The EDF scheduling algorithm seems to be performing better than RM scheduling algorithm for the inputs given at the time of the testing.
This seems to be logical as EDF gives priority to the processes dynamically and prefers the execution of the process whose deadlines are nearer.