

## Abstract

In the process scheduling there are many different scheduling algorithms are used to manage the queue, this is due to the limited resource that is owned by the CPU so that there is a resource that must be utilized efficiently as possible by scheduling algorithms. A scheduling algorithm that is often used is RR (Round Robin). In RR is no priority to regulate the execution queue. Problems will arise if there is a process that must be executed first, the process will wait for a long time even with a queue can be very long.

To solve these problems required additional rules governing the process queue can be executed based on the greatest time remaining. Rules that will be used is the MTR (Most Time Remaining). The rule would give priority for scheduling processes based on the remaining period of the greatest unfinished executed. With the MTR priority then the process with the remaining time will receive first turn, it is expected to minimize turnaround time on a process that requires a large time service.

RR algorithm which is added to the MTR will result optimally when working on scheduling with a process that is not much and have big service time. RRMTR algorithm will work well if the number of I/O bound more than CPU bound. The bigger quantum can make performance better. Overall LTS is better than RRMTR but LTS causes starvation in many condition.

**Keyword:** *Round Robin, time quantum, most time remaining, service time, turnaround time*