Round Robin Algorithm is used for process scheduling by assigning a fixed time quantum to every process which has to be executed. In this type of process scheduling, each process waiting in a ready queue is executed for a particular time quantum. If the burst time of the process is finished in one go then the process is removed from the ready queue. Otherwise, it is returned to the ready queue for its next quantum turn. In our proposal, we have calculated a dynamic time quantum for a process which fits to certain dynamically calculated conditions that we have defined later in the module due to which parameters like average turnaround time, average waiting time and the numbers of context switches have been decreased as compared to the standard Round Robin.

References


Index Terms

Computer Science  Algorithms

Keywords

Turnaround time, Waiting time, context switches, CPU Scheduling, time quantum.