Abstract

A computer system performs its tasks by executing processes. In a CPU multiplexed system multiple processes can execute concurrently by switching among them. For handling the processes CPU scheduling techniques are used, through which the CPU utilization can be enhanced. There are several CPU scheduling algorithms for deciding which of the processes in the ready queue is to be allocated in the CPU. The existing algorithms have some problems that may lead to huge average waiting time or starvation. The SJF results the minimum average waiting time, but it also introduces starvation for bigger processes. The priority scheduling works on the basis of priority assigned to each process results waiting time that is greater than SJF. Sometimes it is required to apply an algorithm which will give attention to both of these algorithms. The proposed algorithm will work as a bridge between SJF and priority on the basis of their arrival.

References

Index Terms

Computer Science Algorithms

Keywords

CPU scheduling, SJF, Priority, preemptive, Gantt chart, turnaround time, waiting time, response time.