

CPU scheduling algorithms

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Scheduling Criteria for comparing the CPU scheduling algorithms

- **CPU utilization** – keep the CPU as busy as possible
- **Throughput** – # of processes that complete their execution per time unit
- **Turnaround time** – amount of time to execute a particular process
- **Waiting time** – amount of time a process has been waiting in the ready queue
- **Response time** – amount of time it takes from when a request was submitted until the first response is produced, not output (for time-sharing environment)

Scheduling Algorithm Optimization Criteria

- Max CPU utilization
- Max throughput
- Min turnaround time
- Min waiting time
- Min response time

CPU scheduling algorithms

- First in First out(FIFO)
- Shortest Job First (SJF)
- Shortest Remaining Time First
- Priority Scheduling
- Round Robin (RR)