CPU Scheduling | Operating System – M02 P02

This is a multipart blog article series, and in this series I am going to explain you the concepts of operating system. This article series is divided into multiple modules and this is the second module which consists of 11 articles.

In this article we will see about CPU scheduling and various time related to CPU scheduling.

**CPU scheduling:** CPU scheduling is a process which allows one process to use the CPU while the execution of another process is on hold (in waiting state) due to unavailability of any resource like I/O etc, thereby making full use of CPU. The aim of CPU scheduling is to make the system efficient, fast and fair.

There are different types of time related to CPU scheduling.

* Arrival time:
  + Arrival time is the time at which the process enters the ready queue or state.
  + Arrival time is a particular point of time.
* Burst time:
  + Burst time is the time required by a process to get execute on CPU.
  + It is the time duration not point of time.
* Completion time:
  + Completion time is the time at which process complete its execution.
  + Completion time is a particular point of time.
* Turnaround time:
  + The total time taken by the process to get completely executed is known as turnaround time.
  + Turnaround time = Completion time – Arrival time.
* Waiting time:
  + Waiting time is the time duration at which the process was ideal and was not executing.
  + Waiting time = Turnaround time - Burst time.
* Response time:
  + In how much time CPU responded to a process after its arrival in the CPU is known as response time.
  + Response time = the time at which process get CPU first time – Arrival time.

This was all about CPU scheduling and different types of time related to CPU scheduling. Hope you liked this is article and learned something from it.

If you have any doubt, question, queries related to this article or just want to share something with me, then please feel free to contact me.