**Operating System Assignment#01**

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Section: H

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| **PREEMPTIVE** | **NON-PREEMPTIVE** |
| * CPU is allocated to the processes for a certain amount of time. | * CPU is allocated to a process until it is completed or switches to the waiting state. |
| * A process can be interrupted. | * A process cannot be interrupted. |
| * A process can go from running state to ready state based on the time quantum. | * Once a process goes into the running state it cannot go back to the ready state. |
| * Preemptive scheduling is flexible. | * Non-preemptive scheduling is rigid. |
| * CPU utilisation is higher. | * CPU utilisation is lower. |
| * Processes can be scheduled. | * Processes cannot be scheduled. |
| * If the high priority processes arrive continuously, then the process with low priority will have to wait for a longer time, which means that the low priority process may have to starve. | * Incoming process that has less CPU time may starve, if there is a process with longer burst time running on the CPU. |
| * Examples: Round Robin, Shortest Remaining Time (SRT) etc. | * Examples: First Come First Serve (FCFS), Shortest Job Time (SJT) etc. |