**Algorithm of SRTF (Shortest Remaining Time First)**

This algorithm is the preemptive version of SJF scheduling. The time quantum is 1 in this algorithm. In the below example there are 3 jobs P1,P2,P3. The arrival time and burst time are given below in the table.

| Process ID | Arrival Time | Burst Time |
| --- | --- | --- |
| P1 | 0 | 7 |
| P2 | 1 | 3 |
| P3 | 3 | 4 |

The Gantt chart is prepared according to the arrival and the burst time given in the table.

We know the Gantt chart is always starts from 0.

**Step 1 :** Since, at time 0, the only available process is P1 with Burst Time 7.

| P1 |
| --- |

0 1

**Step 2 :** As, the scheduling As the scheduling algorithm is SRTF the next process arrives at time unit 1 and the scheduler check for the least Burst Time P2 arrives into the queue.

| P1 P2 |
| --- |

0 1 2

**Step 3 :** As, P2 has again least Burst Time, again P2 arrives at time 2.

| P1 P2 P2 |
| --- |

0 1 2 3

**Step 4:** As, we seen P2 has least Burst Time among the other processes so we put it in the queue till its execution.

| P1 P2 P2 P2 |
| --- |

0 1 2 3 4

**Step 5 :** We are left with P2 and P3, P3 has least Burst Time so, P3 comes into the queue till its executed itself and Burst Time of P3 is 4.

| P1 P2 P2 P2 P3 |
| --- |

0 1 2 3 4 8

**Step 6 :** We have left with only one process ie P1 so we can easily run this process till its execution.

| P1 P2 P2 P2 P3 P1 |
| --- |

0 1 2 3 4 8 14

Once all the processes arrive, no preemption is done and the algorithm will work as SJF.