

**SRTF :**

```
#include <stdio.h>
```

```
struct process {  
    int at, st, ft;  
} ready_list[10];
```

```
int n;
```

```
int dispatcher(int time) {  
    int s_bt = 9999, index = -1;  
    for (int i = 0; i < n; i++) {  
        if (ready_list[i].st > 0 && ready_list[i].at <= time && ready_list[i].st < s_bt) {  
            s_bt = ready_list[i].st;  
            index = i;  
        }  
    }  
    return index;  
}
```

```
int main() {  
    printf("Enter number of processes: ");  
    scanf("%d", &n);  
  
    int original_bt[n];  
    for (int i = 0; i < n; i++) {  
        printf("Enter Arrival Time and Burst Time for Process %d: ", i + 1);  
        scanf("%d %d", &ready_list[i].at, &ready_list[i].st);  
        original_bt[i] = ready_list[i].st;  
    }  
  
    int cur_time = 0, rem_procs = 0;  
    while (rem_procs < n) {  
        int pid = dispatcher(cur_time);  
        if (pid == -1) {  
            cur_time++;  
            continue;  
        }  
  
        ready_list[pid].st--;  
        cur_time++;  
  
        if (ready_list[pid].st == 0) {  
            ready_list[pid].ft = cur_time;  
            rem_procs++;  
        }  
    }  
}
```

```
printf("Process\tAT\tBT\tFT\tTT\tWT\n");
for (int i = 0; i < n; i++) {
    int tt = ready_list[i].ft - ready_list[i].at;
    int wt = tt - original_bt[i];
    printf("%d\t%d\t%d\t%d\t%d\t%d\t%d\n", i + 1, ready_list[i].at, original_bt[i], ready_list[i].ft, tt,
wt);
}

return 0;
}
```