```
#include<stdio.h>
int main()
{
  int time, burst_time[10], at[10], sum_burst_time = 0, smallest, n, i,sumt = 0, sumw = 0;
  printf("enter the number of processes : ");
  scanf("%d", & n);
  for (i = 0; i < n; i++)
  {
    printf("the arrival time for process P %d : ", i + 1);
    scanf("%d", & at[i]);
    printf("the burst time for process P %d : ", i + 1);
    scanf("%d", & burst_time[i]);
    sum_burst_time += burst_time[i];
  }
  burst_time[9] = 9999;
  for (time = 0; time < sum_burst_time;)
  {
    smallest = 9;
    for (i = 0; i < n; i++)
            {
      if (at[i] <= time && burst_time[i] > 0 && burst_time[i] < burst_time[smallest])
        smallest = i;
    }
    printf("P[%d]\t|\t%d\t|\t%d\n", smallest + 1, time + burst_time[smallest] - at[smallest], time -
at[smallest]);
    sumt += time + burst_time[smallest] - at[smallest];
    sumw += time - at[smallest];
    time += burst_time[smallest];
    burst_time[smallest] = 0;
  }
  printf("\n\n average waiting time = %f", sumw * 1.0 / n);
```

```
  printf("\n\n average turnaround time = %f", sumt * 1.0 / n);
  return 0;
}
```

```
enter the number of processes : 4
the arrival time for process P 1 : 0
the burst time for process P 1 : 3
the arrival time for process P 2 : 2
the burst time for process P 2 : 5
the arrival time for process P 3 : 4
the burst time for process P 3 : 1
the arrival time for process P 4 : 5
the burst time for process P 4 : 4

This input specifies that there are 4 processes, with arrival times of 0, 2, 4, and 5, and burst times of 3, 5, 1, and 4, respectively.
```