#include <stdio.h>

int main()

{

      int arrival\_time[10], burst\_time[10], temp[10];

      int i, smallest, count = 0, time, limit;

      double wait\_time = 0, turnaround\_time = 0, end;

      float average\_waiting\_time, average\_turnaround\_time;

      printf("nEnter the Total Number of Processes:t");

      scanf("%d", &limit);

      printf("nEnter Details of %d Processesn", limit);

      for(i = 0; i < limit; i++)

      {

            printf("nEnter Arrival Time:t");

            scanf("%d", &arrival\_time[i]);

            printf("Enter Burst Time:t");

            scanf("%d", &burst\_time[i]);

            temp[i] = burst\_time[i];

      }

      burst\_time[9] = 9999;

      for(time = 0; count != limit; time++)

      {

            smallest = 9;

            for(i = 0; i < limit; i++)

            {

                  if(arrival\_time[i] <= time && burst\_time[i] < burst\_time[smallest] && burst\_time[i] > 0)

                  {

                        smallest = i;

                  }

            }

            burst\_time[smallest]--;

            if(burst\_time[smallest] == 0)

            {

                  count++;

                  end = time + 1;

                  wait\_time = wait\_time + end - arrival\_time[smallest] - temp[smallest];

                  turnaround\_time = turnaround\_time + end - arrival\_time[smallest];

            }

      }

      average\_waiting\_time = wait\_time / limit;

      average\_turnaround\_time = turnaround\_time / limit;

      printf("nnAverage Waiting Time:t%lfn", average\_waiting\_time);

      printf("Average Turnaround Time:t%lfn", average\_turnaround\_time);

      return 0;

}