#include <stdio.h>

int main(){

int arrival\_time[10],burst\_time[10],temp[10],waiting\_time1[10],turn\_a\_time1[10];

int i,j,small,count=0,time,n;

float waiting\_time = 0,turn\_a\_time = 0,end;

printf("Enter the number of Processes:");

scanf("%d", &n);

printf("Enter the order of processes in terms of 1,2,3,4..n:");

for(j=0;j<n;j++)

{

scanf("%d",&temp[j]);

}

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

{

printf("Enter the arrival time and burst time for P%d:",i+1);

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

temp[i] = burst\_time[i];

}

burst\_time[9] = 9999;

for(time = 0; count != n; time++){

small = 9;

for(i = 0;i<n; i++){

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

small = i;

}

burst\_time[small]--;

if(burst\_time[small] == 0){

count++;

end = time + 1;

waiting\_time = waiting\_time + end - arrival\_time[small] - temp[small];

turn\_a\_time = turn\_a\_time + end - arrival\_time[small];

waiting\_time1[small] = end - arrival\_time[small] - temp[small];

turn\_a\_time1[small] = end -arrival\_time[small];

}

}

printf("\nProcess No\tBurst Time\tWaiting Time\tTurn Around Time\n");

for(int i = 0;i<n;i++){

printf(" %d\t\t %d\t\t %d\t\t %d\n" ,i,temp[i],waiting\_time1[i],turn\_a\_time1[i]);

}

printf("\nAverage Waiting Time:%.2f\n", waiting\_time/n);

printf("Average Turnaround Time:%.2f\n", turn\_a\_time/n);

return 0;

}