#include <stdio.h>

int main() {

int n;

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

scanf("%d", &n);

int processes[n];

int i;

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

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

scanf("%d", &processes[i]);

int burstTimes[n];

int arrivalTimes[n];

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

printf("Enter the arrival time and burst time of process %d:" , processes[i]);

scanf("%d %d", &arrivalTimes[i], &burstTimes[i]);

}

int waitingTimes[n];

int turnAround[n];

int waitingTimes2[n];

waitingTimes[0] = 0;

waitingTimes2[0] = 0 - arrivalTimes[0];

float avgWait = waitingTimes2[0];

float avgTurn = 0;

for (i = 0; i < n - 1; i++) {

waitingTimes[i + 1] = burstTimes[i] + waitingTimes[i];

waitingTimes2[i + 1] = waitingTimes[i + 1] - arrivalTimes[i + 1];

avgWait += waitingTimes2[i + 1];

turnAround[i + 1] = waitingTimes2[i + 1] + burstTimes[i + 1];

avgTurn += turnAround[i + 1];

}

turnAround[0] = waitingTimes2[0] + burstTimes[0];

avgTurn += turnAround[0];

printf("\nProcess\t Arrival Time\t Burst Time\t Waiting Time\t Turn Around Time\n");

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

printf(" %d\t\t%d\t\t%d\t\t%d\t\t%d\n", processes[i], arrivalTimes[i], burstTimes[i], waitingTimes2[i], turnAround[i]);

printf("\nAverage Waiting Time = %.2f\nAverage Turn Around Time = %.2f", avgWait / n, avgTurn / n);

return 0;

}