```
#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 Processes\n", limit);
    for(i = 0; i < limit; i++)
    {
        printf("\nEnter Arrival Time:\t");
        scanf("%d", &arrival_time[i]);
        printf("\nEnter Burst Time:\t");
        scanf("%d", &burst_time[i]);
        temp[i] = burst_time[i];
    }
    printf("process\tArrival_time\tBurst_time\n");
    for(i=0; i<limit; i++)
    {
        printf("p%d\t\t%d\t\t%d\n",i+1,arrival_time[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("\nAverage Waiting Time:\t%lf\n", average_waiting_time);
    printf("\nAverage Turnaround Time:\t%lf\n",average_turnaround_time);
    return 0;
}
```

output:

```
avcoe@avcoe-HP-ProDesk-400-G1-SFF:~$ gcc sjf.c
avcoe@avcoe-HP-ProDesk-400-G1-SFF:~$ ./a.out

Enter the Total Number of Processes:	4

Enter Details of 4 Processes

Enter Arrival Time:	0

Enter Burst Time:	4

Enter Arrival Time:	1

Enter Burst Time:	5

Enter Arrival Time:	3

Enter Burst Time:	8

Enter Arrival Time:	4

Enter Burst Time:	9
process		Arrival_time	Burst_time
p1		0		4
p2		1		5
p3		3		8
p4		4		9

Average Waiting Time:		5.500000

Average Turnaround Time:	12.000000
```