

```

#include<stdio.h>
void main()
{
int at[10],bt[10],rt[10],completiont,i,smallest;
int remain=0,n,time;
float sum_wait,sum_turnaround;
printf("\n Enter the number of processes=");
scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        printf("Enter the arrival time for P%d=",i+1);
        scanf("%d",&at[i]);
        printf("Enter the burst time for P%d=",i+1);
        scanf("%d",&bt[i]);
        rt[i]=bt[i];
    }
printf("Given snapshot of execution is");
printf("\nProcess|Arrival|Burst");
for(i=0;i<n;i++)
{
printf("\nP[%d]|\t %d|\t %d",i+1,at[i],bt[i]);
}

printf("\n\n Process|Turnaround Time|Waiting Time");
bt[9]=1000;
    for(time=0;remain!=n;time++)
    {
        smallest=9;
        for(i=0;i<n;i++)
        {
            if(bt[i]<bt[smallest] && at[i]<=time &&rt[i])
            {
                smallest=i;
            }
        }
        rt[smallest]--;
        if(rt[smallest]==0)
        {
            remain++;
            completiont=time+1;
            printf("\nP[%d]|\t %d|\t %d",smallest+1,completiont-at
[smallest],completiont-bt[smallest]-at[smallest]);
            sum_wait=sum_wait+completiont-bt[smallest]-at[smallest];
            sum_turnaround=sum_turnaround+completiont-at[smallest];
        }
    }
printf("\naverage waiting time is %f",sum_wait/n);
printf("\naverage Turnaround time is %f",sum_turnaround/n);

}

```

OUTPUT:-

Enter the number of processes=4
Enter the arrival time for P1=0
Enter the burst time for P1=2
Enter the arrival time for P2=1
Enter the burst time for P2=4
Enter the arrival time for P3=2
Enter the burst time for P3=6
Enter the arrival time for P4=3
Enter the burst time for P4=3
Given snapshot of execution is
Process|Arrival|Burst

P[1]	0	2
P[2]	1	4
P[3]	2	6
P[4]	3	3

Process	Turnaround Time	Waiting Time
P[1]	2	0
P[4]	3	0
P[2]	8	4
P[3]	13	7

average waiting time is 2.750000
average Turnaround time is 6.500000

...Program finished with exit code 0
Press ENTER to exit console.