SRPT

PROGRAM:

#include<stdio.h>

int main()

{

int at[10],bt[10],rt[10],endTime,i,smallest;

int remain=0,n,time,sum\_wait=0,sum\_turnaround=0;

printf("Enter no of Processes : ");

scanf("%d",&n);

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

{

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

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

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

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

rt[i]=bt[i];

}

printf("\n\nProcess\t|Turnaround Time| Waiting Time\n\n");

rt[9]=9999;

for(time=0;remain!=n;time++)

{

smallest=9;

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

{

if(at[i]<=time && rt[i])

{

smallest=i;

}

}

rt[smallest]--;

if(rt[smallest]==0)

{

remain++;

endTime=time+1;

printf("\nP[%d]\t|\t%d\t|\t%d",smallest+1,endTime-at[smallest],endTime-bt[smallest]-at[smallest]);

sum\_wait+=endTime-bt[smallest]-at[smallest];

sum\_turnaround+=endTime-at[smallest];

}

}

printf("\n\nAverage waiting time = %f\n",sum\_wait\*1.0/n);

printf("Average Turnaround time = %f",sum\_turnaround\*1.0/5);

return 0;

}

OUTPUT: