**ASSIGNMENT-7**

**Q1. Write a program to implement SRTscheduling algorithms for the following two cases:**

**P# AT BT**

**P1 0 6**

**P2 2 2**

**Implement the Shortest remaining time algorithm and perform dry run of the program for the above values manually and verify your output.**

#include<stdio.h>

int main()

{

int at[10],bt[10],rt[10],endTime,i,smallest,processGantt[100];

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");

bt[9]=9999;

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

{

smallest=9;

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

{

if(at[i]<=time && bt[i]<bt[smallest] && bt[i]>0)

{

processGantt[time]=i;

smallest=i;

}

}

bt[smallest]--;

if(bt[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-rt[smallest]-at[smallest];

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

}

}

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

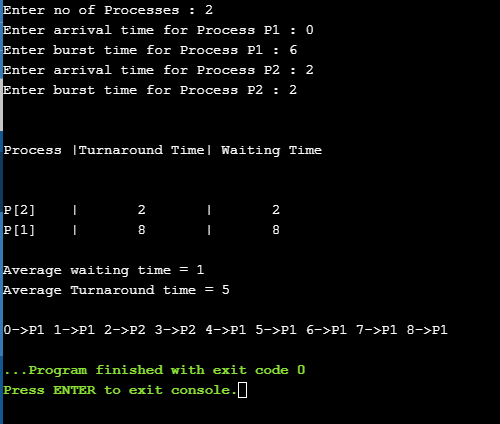
printf("Average Turnaround time = %d\n\n",sum\_turnaround/n);

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

printf("%d->P%d ",i,processGantt[i]+1);

} }

**OUTPUT-**

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