**Shortest Remaining Time First ( SRTF )**

#include <stdio.h>

int main()

{

int a[10],b[10],x[10],i,j,smallest,count=0,time,n;

double avg=0,tt=0,end;

system("COLOR f0");

printf("enter the number of Processes:\n");

scanf("%d",&n);

printf("enter arrival time\n");

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

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

printf("enter burst time\n");

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

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

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

x[i]=b[i];

b[9]=9999;

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

{

smallest=9;

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

{

if(a[i]<=time && b[i]<b[smallest] && b[i]>0 )

smallest=i;

}

b[smallest]--;

if(b[smallest]==0)

{

count++;

end=time+1;

avg=avg+end-a[smallest]-x[smallest];

tt= tt+end-a[smallest];

}

}

printf("\n\nAverage waiting time = %lf\n",avg/n);

printf("Average Turnaround time = %lf",tt/n);

return 0;

}