4. SJF

#include<stdio.h>

int main()

{

int bt[20],p[20],wt[20],tat[20],i,j,n,total=0,totalT=0,pos,temp;

float avg\_wt,avg\_tat;

printf("Enter number of process:");

scanf("%d",&n);

printf("\nEnter Burst Time:\n");

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

{

printf("p%d:",i+1);

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

p[i]=i+1;

}

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

{

pos=i;

for(j=i+1;j<n;j++)

{

if(bt[j]<bt[pos])

pos=j;

}

temp=bt[i];

bt[i]=bt[pos];

bt[pos]=temp;

temp=p[i];

p[i]=p[pos];

p[pos]=temp;

}

wt[0]=0;

for(i=1;i<n;i++)

{

wt[i]=0;

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

wt[i]+=bt[j];

total+=wt[i];

}

avg\_wt=(float)total/n;

printf("\nProcess\t Burst Time \tWaiting Time\tTurnaround Time");

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

{

tat[i]=bt[i]+wt[i];

totalT+=tat[i];

printf("\np%d\t\t %d\t\t %d\t\t\t%d",p[i],bt[i],wt[i],tat[i]);

}

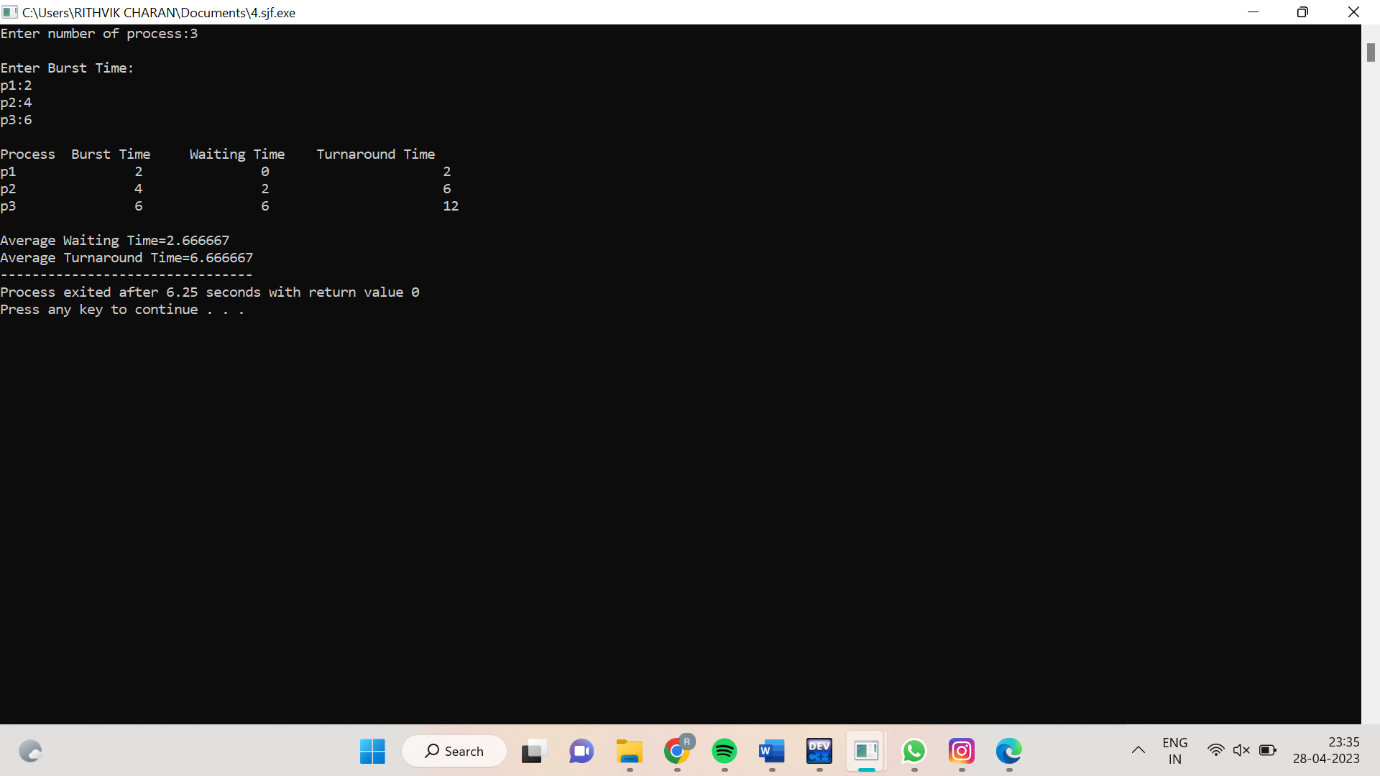
avg\_tat=(float)totalT/n;

printf("\n\nAverage Waiting Time=%f",avg\_wt);

printf("\nAverage Turnaround Time=%f",avg\_tat);

}

OUTPUT



5.PRIORITY SCHEDULING

#include <stdio.h>

void swap(int \*a,int \*b)

{

int temp=\*a;

\*a=\*b;

\*b=temp;

}

int main()

{

int n;

printf("Enter Number of Processes: ");

scanf("%d",&n);

int b[n],p[n],index[n];

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

{

printf("Enter Burst Time and Priority Value for Process %d: ",i+1);

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

index[i]=i+1;

}

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

{

int a=p[i],m=i;

for(int j=i;j<n;j++)

{

if(p[j] > a)

{

a=p[j];

m=j;

}

}

swap(&p[i], &p[m]);

swap(&b[i], &b[m]);

swap(&index[i],&index[m]);

}

int t=0;

printf("Order of process Execution is\n");

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

{

printf("P%d is executed from %d to %d\n",index[i],t,t+b[i]);

t+=b[i];

}

printf("\n");

printf("Process Id Burst Time Wait Time TurnAround Time\n");

int wait\_time=0;

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

{

printf("P%d %d %d %d\n",index[i],b[i],wait\_time,wait\_time + b[i]);

wait\_time += b[i];

}

return 0;

}

OUTPUT

