#include<stdio.h>

#include<string.h>

struct process

{

char proname[10];

int btime;

int wtime;

int turn\_around\_time;

};

void main()

{

float avg\_wtime, total\_wtime, total\_ttime, avg\_ttime;

FILE \*fp;

fp=fopen("/home/vlsi/Desktop/AbhiFCFS/Output.c","w");

struct process p1[10]={0};

int i,j,n;

struct process temp1[10]={0};

printf("Enter the no. of processes");

scanf("%d",&n);

printf("Enter the details of processes(name,burst time)");

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

{

printf("\n%d",i);

scanf("%s%d",p1[i].proname,&p1[i].btime);

}

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

{

for(j=0;j<=n-i-1;j++)

{

if(p1[j].btime>p1[j+1].btime)

{

temp1[j]=p1[j];

p1[j]=p1[j+1];

p1[j+1]=temp1[j];

}

}

}

p1[0].wtime=0;

p1[0].btime=0;

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

{

p1[i].wtime=p1[i-1].btime+p1[i-1].wtime;

total\_wtime=total\_wtime+p1[i].wtime;

p1[i].turn\_around\_time=p1[i].btime+p1[i].wtime;

total\_ttime=total\_ttime+p1[i].turn\_around\_time;

}

fprintf(fp,"Sr. no\tProcess name\tBurst time\tWaiting time\tTurn around\n");

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

{

fprintf(fp,"\n%d\t\t%s\t\t%d\t\t%d\t\t%d",i,p1[i].proname,p1[i].btime,p1[i].wtime,p1[i].turn\_around\_time);

}

avg\_wtime=total\_wtime/n;

fprintf(fp,"\n Average waiting time is %f\n",avg\_wtime);

avg\_ttime=total\_ttime/n;

fprintf(fp,"\n Average turn around time is %f\n",avg\_ttime);

}

**OUTPUT:-**

Sr. no Process name Burst time Waiting time Turn around

1 a 4 0 4

2 b 5 4 9

3 c 8 9 17

4 d 9 17 26

Average waiting time is 7.500000

Average turn around time is 14.000000