**Program 1:**

**AIM: Write a C program for ROUND ROBIN CPU scheduling algorithm.**

**Source Code:**

#include<stdio.h>

int main()

{

int s[10],p[10],n,i,j,wi=0,w[10],t[10], st[10],tq,tst=0;

int tt=0,tw=0; float aw at;

printf("enter no.of process");

scanf("%d",&n);

printf("\n enter time quantum");

scanf("%d",&tq);

printf("\n enter process & service time");

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

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

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

st[i]=s[i];

tst=tst+s[i];

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

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

{

if(s[i]>tq) {

s[i]=s[i]-tq;

w1=w1+tq;

t[i]=w1;

w3[i]=t[i]-st[i];

}

else if(s[i]!=0)

{

w1=w1+tq; t[i]=w1; w[i]=t[i]-st[i]; s[i]=s[i]-tq;

}}

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

tw=tw+w[i]; tt=tt+t[i];}

aw=tw/n; at=tt/n;

printf("process\tst\twt\ttt"); for(i=0;i<n;i++)

printf("%d\t%d\t%d\t%d",p[i],st[i],w[i],t[i]); printf("awt=%d",aw);

printf("att=%d",at);

}

**Input:**

enter no of process 3 enter time quantum 2 enter process&service time 1 4 2 6 3 2

**Output:**

process st wt tt

1 4 4 8

2 6 6 12

3 2 4 6

Awt = 4.000000

att = 8.000000

**Program 2:**

**AIM: Write a C program for SJF CPU scheduling algorithm**

**Source Code:**

#include<stdio.h>

int main()

{

int i,j,bt[10],n,pt[10],wt[10],tt[10],t,k,l,w1=0,t1=0; float at,aw;

printf(“enter no of jobs”);

scanf(“%d”,&n);

printf(“enter burst time”);

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

scanf”(%d”,&bt[i]);

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

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

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

{

t=bt[i];

bt[i]=bt[j];

bt[j]=t;

}

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

{

wt[i+1]=bt[i]+wt[i];

tt[i+1]=tt[i]+bt[i];

w1=w1+wt[i];

t1=t1+tt[i];

}

aw=w1/n; at=t1/n;

printf(“\nbt\twt\ttt”); for(i=0;i<n;i++)

Enter no of jobs 4

Enter burst time 5 12 8 20

**Output:**

Bt wt tt

5 0 5

12 5 13

8 13 25

20 25 45

aw=10.75000

at=22.000000

**Program 3:**

**AIM: Write a C program for FCFS CPU scheduling algorithm**

**Source Code:**

include<stdio.h>

int main()

{

int i,j,bt[10],n,pt[10],wt[10],tt[10],t,k,l,w1=0,t1=0; float at,aw;

printf(“enter no of jobs”);

scanf(“%d”,&n);

printf(“enter burst time”);

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

scanf”(%d”,&bt[i]);

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

{

wt[i+1]=bt[i]+wt[i];

tt[i+1]=tt[i]+bt[i];

w1=w1+wt[i];

t1=t1+tt[i];

}

aw=w1/n;

at=t1/n;

printf(“\nbt\twt\ttt”); for(i=0;i<n;i++)

printf(“%d\t%d\t%d\n”,bt[i],wt[i],tt[i]);

printf(“aw=%d\nat=%d”,aw,at);

getch();

}

**Input:**

enter no of jobs 3

enter bursttime 12 8 20

**Output:**

bt wt tt

12 0 12

8 12 20

20 20 40

aw=10.666670 at=24.00000

**Program 4:**

**AIM: Write a C Program for priority CPU scheduling algorithm.**

**Source Code:**

#include<stdio.h>

int main()

{

int i,j,bt[10],n,pt[10],wt[10],tt[10],t,k,l,w1=0,t1=0; float at,aw;

printf(“enter no of jobs”);

scanf(“%d”,&n); printf(“enter burst time”); for(i=0;i<n;i++)

scanf”(%d”,&bt[i]); printf(“enter priority values”); for(i=0;i<n;i++)

scanf(“%d”,&pt[i]); for(i=0;i<n;i++) for(j=0;j<n;j++) if(pt[i]<pt[j])

{

t=pt[i]; pt[i]=pt[j]; pt[j]=t; k=bt[i]; bt[i]=bt[j]; bt[j]=k;

}

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

{

wt[i+1]=bt[i]+wt[i]; tt[i+1]=tt[i]+bt[i]; w1=w1+wt[i]; t1=t1+tt[i];

}

aw=w1/n; at=t1/n;

printf(“\nbt\tprority\twt\ttt”); for(i=0;i<n;i++)

printf(“%d\t%d\t%d\t%d\n”,bt[i],pt[i],wt[i],tt[i]); printf(“aw=%d\nat=%d”,aw,at);

getch();

}

**Input:**

Enter no of jobs 4

Enter bursttime 10 2 4 7

Enter priority values 4

2

1

3

**Output:**

Bt priority wt tt

4 1 0 4

2 2 4 6

7 3 6 13

10 4 13 23

aw=5.750000 at=12.500000