

PRIORITY SCHEDULING

AIM:

PROGRAM TO IMPLEMENT PRIORITY SCHEDULING USING C LANGUAGE.

In priority scheduling algorithm each process has a priority associated with it and as each process hits the queue, it is stored in based on its priority so that process with higher priority are dealt with first.

It should be noted that equal priority processes are scheduled in [FCFS](#) order.

ALGORITHM:

- 1- First input the processes with their burst time and priority.
- 2- Sort the processes, burst time and priority according to the priority.
- 3- Now simply apply [FCFS](#) algorithm.

Write a C Program to implement priority scheduling?

Input 1 : Total no.of Process (EX:5)

Input 2: Burst time of all five process (EX: 10,1,2,1,5)

Input 3: Priority of all process (Ex: 3,1,4,5,2)

For example:

Test	Input	Result
T1	5	8
	10	12
	1	
	2	
	1	
	5	
	3	
	1	
	4	
	5	
	2	

PROGRAM:

SJP Scheduling and Priority Scheduling: Attempt review - Google Chrome
sathyabama.co.in/moodle/question/review.php?attempt=638389&id=15554

Answer: (penalty regime: 0 %)

```
4 int main()
3 {
4     int i,j,n,bt[10],p[10],compt[10],wt[10],tat[10],temp1,temp2;
5     float sumwt=0.0,sumtat=0.0;
6     int avgwt,avgtat;
7     scanf("%d",&n);
8     for(i=0;i<n;i++)
9         scanf("%d",&bt[i]);
10    for(i=0;i<n;i++)
11        scanf("%d",&p[i]);
12    for(i=0;i<n;i++)
13        for(j=i+1;j<n;j++)
14            if(p[i]>p[j])
```

SJP Scheduling and Priority Scheduling: Attempt review - Google Chrome
sathyabama.co.in/moodle/question/review.php?attempt=638389&id=15554

Answer: (penalty regime: 0 %)

```
11     scanf("%d",&p[i]);
12     for(i=0;i<n;i++)
13         for(j=i+1;j<n;j++)
14             if(p[i]>p[j])
15             {
16                 temp1=bt[i];
17                 bt[i]=bt[j];
18                 bt[j]=temp1;
19                 temp2=p[i];
20                 p[i]=p[j];
21                 p[j]=temp2;
22             }
```

```
SPP Scheduling and Priority Scheduling: Attempt review - Google Chrome
sathyabama.co.in/moodle/question.php?id=638389&attempt=1554

18     bt[j]=temp1;
19     temp2=p[i];
20     p[i]=p[j];
21     p[j]=temp2;
22 }
23 compt[0]=bt[0];wt[0]=0;
24 for(i=1;i<n;i++)
25     compt[i]=bt[i]+compt[i-1];
26 for(i=0;i<n;i++)
27 {
28     tat[i]=compt[i];
29     wt[i]=tat[i]-bt[i];
30     sumtat+=tat[i];
31     sumwt+=wt[i];
32 }
```

```
SPP Scheduling and Priority Scheduling: Attempt review - Google Chrome
sathyabama.co.in/moodle/question.php?id=638389&attempt=1554

20     for(i=0;i<n;i++)
21     {
22         tat[i]=compt[i];
23         wt[i]=tat[i]-bt[i];
24         sumtat+=tat[i];
25         sumwt+=wt[i];
26     }
27     avgwt=(sumwt/n);avgtat=(sumtat/n);
28     for(i=0;i<n;i++)
29     {
30     }
31     printf("%d\n%d\n",avgwt,avgtat);
32     return 0;
33 }
```

RESULT;

	Test	Input	Expected	Got	
✓	T1	5 10 1 2 1 5 3 1 4 5 2	8 12	8 12	✓
✓	T2	3 10 7 3 1 3 2	7 14	7 14	✓

Passed all tests! ✓

RESULT:

PRIORITY SCHELDULING WAS SUCCESSSSFULLY IMPLEMENT USING C LANGUAGE.