

Ex. No.: 7c

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## PRIORITY SCHEDULING

### Aim:

To implement priority scheduling technique

### Algorithm:

1. Get the number of processes from the user.
2. Read the process name, burst time and priority of process.
3. Sort based on burst time of all processes in ascending order based priority
4. Calculate the total waiting time and total turnaround time for each process
5. Display the process name & burst time for each process.
6. Display the total waiting time, average waiting time, turnaround time

### Program Code:

```
#include <stdio.h>
int main ()
{
    int bt[20], p[20], wt[20], tat[20],
        pr[20], i, j, n, total=0, ps, temp,
        avg_wt, avg_tat;
    printf ("\nEnter burst time and
            priority \n");
    for (i=0; i<n; i++)
    {
        printf ("\n P[%d] \n", i+1);
        printf ("Burst time ");
        scanf ("%d", &bt[i]);
    }
}
```

```

printf("Priority");
scanf ("%d", &pr(i));
p[i] = i + 1;

}

for (i=0; i<n; i++)
{
    pos = i;
    for (j=i+1; j<n; j++)
    {
        if (pr(j) < pr(pos))
            pos = j;
    }

    temp = pr[i];
    pr[i] = pr[pos];
    pr[pos] = temp;
    temp = bt[i];
    bt[i] = bt[pos];
    bt[pos] = temp;
    p[i] = pr[i];
    p[pos] = temp;
}

```

Output:

Enter Total number of Processes : 4

Enter Burst time and Priority :

P[1]

Burst time : 6

Priority : 3

P[2]

BT : 2

P : 2

P[3]

BT : 14

P : 1

P[4]

BT : 6

P : 4

Process	BT	WT	TAT
3	14	0	14
2	2	14	16
1	6	16	22
4	6	22	28
		48	

Avg WT = 13  
Avg TAT = 20

Result: The above commands are executed successfully