

FCFS

Process	AT (ms)	BT (ms)	CT (ms)	TAT (ms)	WT (ms)
1	0	24	24	24	0
2	0	3	27	27	24
3	0	3	30	30	27

Average TAT: 17ms

Average WT: 27ms

P_1	P_2	P_3	
-------	-------	-------	--

24

27

30

0

Ex. No.: 6a)

Date: 19.2.25

FIRST COME FIRST SERVE

Aim:

To implement First-come First-serve (FCFS) scheduling technique

Algorithm:

1. Get the number of processes from the user.
2. Read the process name and burst time.
3. Calculate the total process time.
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 n;
    printf("Enter the number of processes:");
    scanf("%d", &n);
    int pro[n], bct[n], et[n], tat[n], wt[n], abt[n],
    awt=0, at=0;
    for(int i=0; i<n; i++)
    {
        pro[i]=i;
    }
    printf("Enter the bursttime of the processes:");
    for(int i=0; i<n; i++)
    {
        scanf("%d", &bct[i]);
    }
}
```



```
int j = 0;
```

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

```
{  
    for (int k = 0; k < bt[i]; k++)
```

```
{  
    j = j + 1;
```

```
}
```

```
    ct[i] = j;
```

```
}
```

```
printf("The completion time:");
```

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

```
{  
    printf("%d\n", ct[i]);
```

```
}
```

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

```
{  
    tat[i] = ct[i] + bt[i];
```

```
    wt[i] = tat[i] - bt[i];
```

```
}
```

```
printf("The total turn around time:");
```

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

```
{  
    printf("%d\n", tat[i]);
```

```
}
```

```
printf("The waiting time:");
```

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

```
{  
    printf("%d\n", wt[i]);
```

```
}
```

```

for (int i = 0; i < n; i++)
{
    atat = tat[i] + atat;
    awt = wt[i] + awt;
}
printf("The average turn around time: %.d \n", atat/n);
printf("The average waiting time: %.d \n", awt/n);
return 0;
}

```

OUTPUT:

Enter the no. of processes: 3

Enter the burst time of processes: 24

3

3

The completion time: 24

27

30

The waiting time: 0

24

27

The ~~average~~ turn around time: 24

27

30

The average waiting time: 17 ms

The average turn around time: 27 ms.

Sample Output:

Enter the number of process:

3

Enter the burst time of the processes:

24 3 3

Process	Burst Time	Waiting Time	Turn Around Time
0	24	0	24
1	3	24	27
2	3	27	30

Average waiting time is: 17.0

Average Turn around Time is: 19.0

Result:

The first come first served (FCFS) scheduling
is implemented using C.

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