

# OPERATING SYSTEM - CS23431

## EXP 6(A)

# FIRST COME FIRST SERVE

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PROGRAM:

```
#include <stdio.h>
```

```
int main() {
```

```
int n, i; printf("Enter number of processes: "); scanf("%d", &n);
```

```
int bt[n], wt[n], tat[n];
```

```
printf("\nEnter burst time for each process:\n");
```

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

```
printf("P[%d]: ", i + 1);
```

```
scanf("%d", &bt[i]);
```

}

```
wt[0] = 0;
```

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

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

}

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

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

}

```
int total wt = 0, total tat = 0;
```

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

```
total_wt += wt[i];
```

```
total_tat += tat[i];
```

}

```
printf("\nProcess\tBurst Time\tWaiting Time\tTurnaround Time\n");
```

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

```
printf("P[%d]\t%5d\t\t%5d\t\t%5d\n",
```

```
        i + 1, bt[i], wt[i], tat[i]);  
    }
```

```
    printf("\nTotal waiting time = %d\n", total_wt);  
    printf("Total turnaround time = %d\n", total_tat);  
    printf("Average waiting time = %.2f\n", (float)total_wt / n);  
    printf("Average turnaround time = %.2f\n", (float)total_tat / n);  
  
    return 0;
```

```
}
```

OUTPUT:

```
Average turn around time is: 27  
[student@localhost ~]$ vi fcfs164.c  
[student@localhost ~]$ gcc fcfs164.c  
[student@localhost ~]$ ./a.out  
Enter number of process: 3  
  
Enter burst time for each process: 24  
3  
3  
Process  Burst time  Waiting time  Turn Around Time  
0  24  0  24  
1  3  24  27  
2  3  27  30  
  
Total waiting time is: 51  
Total turn around time is: 81  
Average waiting time is: 17  
Average turn around time is: 27  
[student@localhost ~]$ █
```