

OPERATING SYSTEM - CS23431

EX 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%d\t%d\t%d\t%d\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:

```
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
```