

Step 3:- For each process in the ready queue  
 name and burst time

Step 4:- Set the waiting of the first process as 0  
 and its burst time as its turn around time

Step 5:- For each process in the ready queue calculate  
 a) waiting time  $(n) = \text{waiting } (n-1) + \text{Burst time } (n-1)$   
 b) Turn around time  $(n) = \text{waiting time } (n) + \text{Burst time } (n)$

~~Step 6~~ to Step - 6 :- Calculate

a) average waiting time =  $\frac{\text{Total waiting time}}{\text{Number of process}}$   
 b) average turn around time =  $\frac{\text{Total turn around time}}{\text{Number of process}}$

Step 7 :- Stop the process.

Source code :-

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

int main()
{
    int bt[20], wt[20], tat[20], i, n;
    float wtavg, tatavg;
    printf("Enter the number of processes (n):");
    scanf("%d", &bt[i]);
```

```

wt[0] = wtavg = 0;
lat[0] = latavg = bt[0];
for (i = 1; i < n; i++)
{
    wt[i] = wt[i-1] + bt[i-1];
    lat[i] = lat[i-1] + bt[i];
    wtavg = wtavg + wt[i];
    latavg = latavg + lat[i];
}

```

```

printf("Process |t Burst time |t waiting time |t  
Turn around time |n");

```

```

for (i = 0; i < n; i++)
printf("|t P %d |t |t %d |t |t %d |t |t %d |n", i, bt[i], wt[i], lat[i]);

```

```

printf("Average waiting time %d |n", wtavg/n);

```

```

getch();

```

```

}

```

Gantt chart



main.c

input

Enter the number of processes -- 5

Enter Burst Time for Process 0 -- 6

Enter Burst Time for Process 1 -- 7

Enter Burst Time for Process 2 -- 8

Enter Burst Time for Process 3 -- 9

Enter Burst Time for Process 4 -- 10

PROCESS	BURST TIME	WAITING TIME	TURNAROUND TIME
P0	6	0	6
P1	7	6	13
P2	8	13	21
P3	9	21	30
P4	10	30	40

Average Waiting Time -- 14.000000

Average Turnaround Time -- 22.000000

...Program finished with exit code 0

Press ENTER to exit console.