

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, bt[30], wait_t[30], turn_ar_t[30], av_wt_t=0, avturn_ar_t=0, i, j;
    printf("Please enter the total number of processes(maximum 30):");
    scanf("%d", &n);
    printf("\nEnter The Process Burst Timen");
    for(i=0; i<n; i++) // burst time for every process will be taken as input
    {
        printf("P[%d]:", i+1);
        scanf("%d", &bt[i]);
    }
    wait_t[0]=0;
    for(i=1; i<n; i++)
    {
        wait_t[i]=0;
        for(j=0; j<i; j++)
            wait_t[i]+=bt[j];
    }
    printf("\nProcess\t\tBurst Time\tWaiting Time\tTurnaround Time");
    for(i=0; i<n; i++)
    {
        turn_ar_t[i]=bt[i]+wait_t[i];
        av_wt_t+=wait_t[i];
        avturn_ar_t+=turn_ar_t[i];
    }
}
```

```
printf("\nP[%d]\t\t%d\t\t%d\t\t%d\t\t%d",i+1,bt[i],wait_t[i],turn_ar_t[i]);
}
av_wt_t/=i;
avturn_ar_t/=i; // average calculation is done here
printf("\nAverage Waiting Time:%d",av_wt_t);
printf("\nAverage Turnaround Time:%d",avturn_ar_t);
return 0;
}
```