

EX NO: 4	CPU SCHEDULING ALGORITHMS
DATE:	

A. FIRST COME FIRST SERVE AIM:

To write the program to implement CPU & scheduling algorithm for first come first serve scheduling.

ALGORITHM:

1. Start the program.
 2. Get the number of processes and their burst time.
 3. Initialize the waiting time for process 1 and 0.
 4. Process for($i=2; i \leq n; i++$), $wt.p[i] = p[i-1] + bt.p[i-1]$.
 5. The waiting time of all the processes is summed then average value time is calculated.
 6. The waiting time of each process and average times are displayed
 7. Stop the program.
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PROGRAM:

```
#include<stdio.h>
void main()
{
int i,n,sum,wt,tat,twt,ttat;
int t[10];
float awt,atat;
printf("enter the of processer:");
scanf("%d",&n);
for(i=0;i<n;i++)
{
printf("\n enter burst time");
scanf("\n %d",&t[i]);
}
printf("\n FIRST COME FRIST SERVE SCHEDULING");
printf("\n processid\twaittingtime\tturnaroundtime\n");
printf("1\t0\t0\t0\n",t[0]);
sum=0;
twt=0;
ttat=t[0];
for(i=1;i<n;i++)
{
sum+=t[i-1];
wt=sum;
tat=sum+t[i];
twt=twt+wt;
ttat=ttat+tat;
printf("\n%d\t%d\t%d",i+1,wt,tat);
printf("\n");
}
awt=(float)twt/n;
atat=(float)ttat/n;
printf("\n average waiting time%4.2f",awt);
printf("\n average turnaround time %4.2f",atat);
}
```

OUTPUT:

```
mohamedinam@Mohamed-Inam-PC: ~  
mohamedinam@Mohamed-Inam-PC:~$ gcc fcfs.c -o fcfs  
mohamedinam@Mohamed-Inam-PC:~$ ./fcfs  
enter the of processor:3  
  
enter burst time3  
enter burst time3  
enter burst time3  
  
FRIST COME FRIST SERVE SCHEDULING  
processid      waittingtime    turnaroundtime  
1              0              3  
2              3              6  
3              6              9  
  
average waiting time3.00  
average turnaround time 6.00mohamedinam@Mohamed-Inam-PC:~$ █
```

RESULT:

Thus the FCFS process scheduling program was executed and verified successfully.