Ex. No.: 6a)
Date: 21/2/25

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,i;
float total=wt=0, total_tat=0;
printf("Enter the number of processes");
scanf("%d",&n);
int bt[n], wt[n], tat[n];
char process[n][10];
print("Enter the process names");
for(i=0;i<n;i++)
{scanf("%s",process[i]);}
printf("Enter the burst time.");
for(i=0;i<n;i++){
        scanf("%d",&b[i]);
}
```

```
wt[0]=0;
for(i=1;i<n;i++){
  wt[i] = wt[i-1] + bt[i-1];
  total_wt += wt[i];
}

for(i=0;i<n;i++){
    tat[i] = wt[i]+bt[i];
    total_tat += tat[i];
  }

printf("\n process \t Burst time \t
        waiting time \t Turn around
        Time \n");

    for(int i=0;i<n;i++){
      printf("%s \t %d \t \t %d \t \t \n",
          process[i], bt[i], wt[i],
          tat[i]);
        }

printf("\n Avg waiting Time. %.2f ",
                    total_wt \n");

printf("\n Avg Turn around Time
                    %.2f", total_tat/n);

return 0;
}
```

Sample Output:

Enter the number of process:

3

Enter the burst time of the processes:

24 3 3

Process	Burst Time	Waiting Time	Turn Around Time
0	24	0	24
1	3	24	27
2	3	27	30

Average waiting time is: 17.0

Average Turn around Time is: 19.0

Process Burst Time waiting Time Turnaround Time

0	25	0	25
1	4	25	29
2	4	29	33

Average waiting time : 18

Average turnaround time : 27

Result: The program for CPU scheduling, using first come first serve has been executed sucessfully and output has been verified.