YAŞAR UNIVERSITY FACULTY OF ENGINEERING

COMP3323 Operating Systems

Psudocode for FCFS(Non-pre):

Hints:

1) **Create a struct for process**

   int id,bt,at,ct,wt,tat.

(bt:burst time , wt:waiting time, ct: complation time, tat: turnaround time, at:arrival time)

2) **You need a sort function for processes. (Sort by a.t.)**

Code:

-Enter (max 10) **process no, wt** and **at** (or without at). (Select with switch-case or whatever you want **but you have to add option for at**.)

-Calculate **wt,ct,tat,avg.wt and avg tat.**

-Ct = bt + at;

Helpful:

```
/*
pro[0].ct=pro[0].bt+pro[0].at;     // Initial Completion Time = Burst Time Of 1st Process
        İf pro[i-1].ct  <  pro[i].at then
                pro[i].ct=pro[i].at+pro[i].bt;
        else
                pro[i].ct=pro[i-1].ct+pro[i].bt;
        endif
*/
```

Tat = ct – at;
Avgtat = sum of tat / # of processes;

Wt = tat – bt;
avgwt = sum of wt / # of processes;

Output :

```
Enter No Of Processes(Integer):3

Process Name: 1
Burst Time[1]: 5

Process Name: 2
Burst Time[2]: 9

Process Name: 3
Burst Time[3]: 6

Select Code
1.With Arrival Time     2.Without Arrival Time  :1
Arrival Time[1]: 0
Arrival Time[2]: 3
Arrival Time[3]: 6

------------------------------------------------
PNO      AT              BT              CT              TAT             WT
1        0.000000        5.000000        5.000000        5.000000        0.000000
2        3.000000        9.000000        14.000000       11.000000       2.000000
3        6.000000        6.000000        20.000000       14.000000       8.000000
------------------------------------------------

        Average Waiting Time = 3.33
        Average Turn Around Time = 10.00
```