MODEL PRACTICAL EXAM - OS

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Branch: CSE

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Subject Code: SCSA2502

Subject Name: Operating System Lab

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No. of pages:

Aim: Write a C program to implement FCFS algorithm.

Algorithm:

Step1) Start

Step2- Accept the no. of process

Step3: for each process assign ~~processid and~~ CPU burst time.

Step4- set waiting time (wt) as '0' for all and if burst time ~~time~~ as its turnaround time (TAT)

(bt)

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Step 5: for Each process Calculate

(a) ~~WT = WT(n-1) + BT~~

(a) WT for process(n) = WT of process(n-1) + BT of process(n-1)

(b) TAT for Process(n) = WT of process(n) + BT of process(n)

Step 6: Calculate

(a) Avg. WT = Total WT / No. of process

(b) Avg TAT = Total TAT / No of process

Step 7 Stop

Program :-

```
#include <stdio.h>
int main()
{
    int n, sum = 0, bt[10] = {0}, tat[10] = {0}, wt[10] = {0};
    int at[10] = {0}, ct[10] = {0};

    float totalTAT = 0, totalWT = 0;
    scanf("%d", &n);
    for (int i = 0; i < n; i++)
    {
        sum += bt[j];
        ct[j] += sum;
    }
    for (int k = 0; k < n; k++)
    {
        tat[k] = ct[k] - at[k];
        totalTAT += tat[k];
    }
    for (int k = 0; k < n; k++)
    {
```

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```
wt[k] = tat[k] - bt[k]
totalWT += wt[k];
}// 2nd k for loop.
printf("%f\n", totalWT/n);
printf("%f\n", totalTAT/n);

return 0;
}
```

Output

Test	Input	Expected	Got
T1	3 24 3 3	17.000000 27.000000	17.000000 27.000000
T2	3 15 10 13	13.333333 26.000000	13.333333 26.000000

	Test	Input	Expected	Got	
✔	T1	3 24 3 3	17.000000 27.000000	17.000000 27.000000	✔
✔	T2	3 15 10 13	13.333333 26.000000	13.333333 26.000000	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.