

Name :- TUSHAR KUMAR
Course :- BSc. IT - A
Semester :- IInd
Std. ID :- 20051120

Date _____
DELTA Pg No. _____

Mock Test

Operating System

Q:- WAP to implement FCFS scheduling algo.

Solⁿs - CODE :-

```
#include <stdio.h>
#include <string.h>
int main()
{
    char pn[10][10], t[10];
    int arr[10], bur[10], star[10], CT[10], tat[10]
    ,wt[10], i, j, n, temp;

    int totwt = 0, tatat = 0;
    printf("Enter the number of processes : ");
    scanf("%d", &n);

    for(i=0; i<n; i++)
    {
        printf("Enter the Process Name, Arrival Time &
        Burst Time : ");
        scanf("%s %d %d", &pn[i], &arr[i], &bur[i]);
    }

    for(i=0; i<n; i++)
    {
        for(j=0; j<n; j++)
        {
            if(arr[i] < arr[j])
                {
```

~~what's this~~

```
temp = arr[i];
arr[i] = arr[j];
arr[j] = temp;
temp = bur[i];
bur[i] = bur[j];
bur[j] = temp;
strcpy(t, pn[i]);
strcpy(pn[i], pn[j]);
strcpy(pn[j], t);
```

{ ? }

{ ? }

```
for (i=0; i<n; i++)
{ ? }
```

```
if (i==0)
```

```
star[i] = arr[i];
```

```
else
```

```
star[i] = CT[i-1];
```

```
wt[i] = star[i] - arr[i];
```

```
CT[i] = star[i] + bur[i];
```

```
tat[i] = CT[i] - arr[i];
```

{ ? }

```
printf ("\n PNName \t ArvTime \t BurTime
\t WaitTime \t StartTAT \t CT \t ");
```

```
for (i=0; i<n; i++)
{ ? }
```

```
printf ("\n %s \t %d \t %d \t %d \t %d
\t %d \t %d \t %d ", pn[i]
, arr[i], bur[i], wt[i], star[i],
tat[i], CT[i]);
```

```
totwt += wt[i];
```

```
tottat += tat[i];
```

~~just for fun~~

{ ? }

```
printf ("\n Average Waiting Time : %.0.2f ",  
       (float) totwt \n);
```

```
printf ("\n Average Turn Around Time : %.0.2f ",  
       (float) tattat \n);
```

```
return 0;
```

}

~~Tutorial~~

Microsoft Windows [Version 10.0.19042.1052]
(c) Microsoft Corporation. All rights reserved.

```
C:\Users\ASUS>cd "C:\Users\ASUS\AppData\Local\Temp\" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "C:\Users\ASUS\AppData\Local\Temp\"tempCodeRunnerFile
Enter the number of processes:4
Enter the ProcessName, Arrival Time& Burst Time:p0
0
6
Enter the ProcessName, Arrival Time& Burst Time:p1
1
8
Enter the ProcessName, Arrival Time& Burst Time:p2
2
10
Enter the ProcessName, Arrival Time& Burst Time:p3
3
11

PName    Arrtime  Burtime  WaitTime  Start   TAT    CT
p0        0        6         0         0       6      6
p1        1        8         5         6       13     14
p2        2        10        12        14     22     24
p3        3        11        21        24     32     35
Average Waiting time: 9.50
Average Turn Around Time:18.25
C:\Users\ASUS\AppData\Local\Temp>
```