

Name :- TUSHAR KUMAR  
Course :- BSc.(IT) - 2A  
Std. ID :- 20051120

Date \_\_\_\_\_  
DELTA Pg No. \_\_\_\_\_

## MID-TERM PRACTICAL Operating System

Q17.  
Sol. →

### CODE #

```
#include <stdio.h>
#include <conio.h>
#include <string.h>
int main()
```

{

```
int N, Ti[10], L[20], i, j, temp, st[10], ff[10],
wt[10], ta[10];
```

```
int totwt = 0, totta = 0;
```

```
int awt, ata;
```

```
char or[10][10], t[10];
```

```
printf("Enter the number of customer :");
```

```
scanf("%d", &N);
```

```
for (i=0; i<N; i++)
```

{

```
printf("Enter customer number, order time &  
cooking time :");
```

{

```
scanf("%s %d %d", or[i], &Ti[ ], &Li[i]);
```

```
for (i=0; i<N; i++)
```

{

```
for (j=0; j<N; j++)
```

{

```
if (Li[i] < Li[j])
```

{

temp =  $T_i[i]$  ;

$T_i[i] = T_i[j]$  ;

$T_i[j] = \text{temp}$  ;

temp =  $L_i[i]$  ;

$L_i[i] = L_i[j]$  ;

$L_i[j] = \text{Temp}$  ;

strcpy(t, or[i]);

strcpy(or[i], or[j]);

strcpy(or[j], t);

{

{

for(i=0; i<N; i++)

{

if (i==0)

$s[i] = T_i[i]$ ;

else

$s[i] = f[i-1]$ ;

$w[i] = s[i] - T_i[i]$ ;

$f[i] = s[i] + L_i[i]$ ;

$t[i] = f[i] - T_i[i]$ ;

$\text{tot } w[i] = w[i]$ ;

$\text{tot } t[i] = t[i]$ ;

{

$awt = (\text{float}) \text{tot } w / N$ ;

$ata = (\text{float}) \text{tot } t / N$ ;

printf("\n order () \t ordertime (min) \t  
 cooking time (min) \t waiting time (min)");

```
for (i=0 ; i<N ; i++)  
printf ("%s %5d %5d %5d  
%5d", or[i], Ti[i], Li[i],  
wi[i], fa[i]);  
printf (" Average waiting time is: %d", awt);  
getch();  
g
```

Tushy Dev.

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 customer:3

Enter customer number, ordertime& cooking time:or1

2

3

Enter customer number, ordertime& cooking time:or2

2

5

Enter customer number, ordertime& cooking time:or3

1

8

	order()	ordertime(min)	cookingtime(min)	waitingtime(min)
or1	2	3	0	3
or2	2	5	3	8
or3	1	8	9	17

Average waiting time is:4