

```
#include <stdio.h>
#include <conio.h>
#include <string.h>
```

```
void main()
```

```
{
```

```
    int
```

```
    Li[20], Ti[10], N, i, j temp, st[10], ft[10], wt[10],
    ta[10];
```

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

```
    int aent, ata;
```

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

```
    // clrscr();
```

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

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

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

```
    {
```

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

```
        // fflush();
```

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

```
    }
```

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

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

```
        {
```

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



```

{
    temp = Ti[i];
    Ti[i] = Ti[j];
    Ti[j] = temp;
    Temp = Li[i];
    Li[i] = Li[j];
    Li[j] = temp;
    strcpy (t, or[i])
    strcpy (or[i], or[j]);
    strcpy (or[j], t);
}
}

```

```

for (i=0, i<N; i++)
{
    if (i==0)
        st[i] = Ti[i]
    else
        st[i] = Ft[i-1];
    wt[i] = st[i] - Ti[i]
    Ft[i] = st[i] + Li[i]
    ta[i] = Ft[i] - Ti[i]
    totwt += wt[i]
    totta += ta[i]
}

```



```
aut = (float) totut / N;  
ata = (float) totta / N;
```

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

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

```
printf ("|n %s \t %5d \t \t %5d \t \t  
%5d \t \t %5d", or[i], Ti[i], Li[i],  
ut[i], ta[i]);
```

```
printf ("|n Average waiting time is : %d \t aut);
```

```
getch();
```

```
}
```

Microsoft Windows [Version 10.0.19042.1052]  
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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
or2	2	5	3
or3	1	8	9

Average waiting time is:4