

Mechanics' appointments before

```
Ayman :  
Appointment number (1) -> 10 : 40  
Appointment number (2) -> 9 : 15  
Khaled :  
Appointment number (1) -> 9 : 30  
Mai :  
Appointment number (1) -> 9 : 0  
Appointment number (2) -> 5 : 30  
Appointment number (3) -> 7 : 15
```

Mechanics' appointments after

```
Ayman :  
Appointment number (1) -> 10 : 40  
Appointment number (2) -> 9 : 15  
Appointment number (3) -> 1 : 0  
Khaled :  
Appointment number (1) -> 9 : 30  
Appointment number (2) -> 4 : 0  
Appointment number (3) -> 1 : 0  
Mai :  
Appointment number (1) -> 9 : 0  
Appointment number (2) -> 5 : 30  
Appointment number (3) -> 7 : 15  
Appointment number (4) -> 3 : 0
```

Asks for the number of customers to create a dynamic array

```
Enter the number of the customers : 4
```

Enter the data of the customers manually before using files

```
Enter your name : Ahmed
Enter your age : 25
Enter your appointment (ex: 1 30) : 1 0
Enter your name : Sara
Enter your age : 29
Enter your appointment (ex: 1 30) : 4 0
Enter your name : Kareem
Enter your age : 23
Enter your appointment (ex: 1 30) : 3 0
Enter your name : Mohammed
Enter your age : 40
Enter your appointment (ex: 1 30) : 1 0
```

Validation to make sure that the appointments are real

```
Enter your age : 25
Enter your appointment (ex: 1 30) : 25 0
Enter valid appointment!!
Enter the hours (0-24) :
```

```
Enter your appointment (ex: 1 30) : 24 0
Enter your name :
```

```
Enter your appointment (ex: 1 30) : 24 5
Enter valid appointment!!
Enter the hours (0-24) :
```

```
Enter your appointment (ex: 1 30) : 1 61
Enter valid appointment!!
Enter the hours (0-24) :
```

The cout for the array before sorting

```
Mr/s. Ahmed should be assigned to Ayman at 1:0.
Mr/s. Sara should be assigned to Khaled at 4:0.
Mr/s. Kareem should be assigned to Mai at 3:0.
Mr/s. Mohammed should be assigned to Khaled at 1:0.
```

The cout for the queue after sorting

Mr/s. Ahmed has an appointment at 1:0 with Ayman.
Mr/s. Mohammed has an appointment at 1:0 with Khaled.
Mr/s. Kareem has an appointment at 3:0 with Mai.
Mr/s. Sara has an appointment at 4:0 with Khaled.