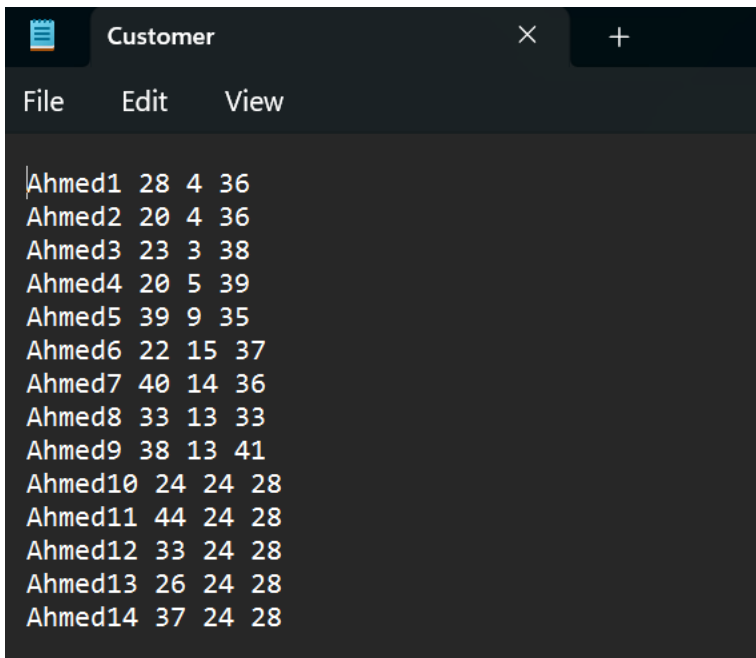
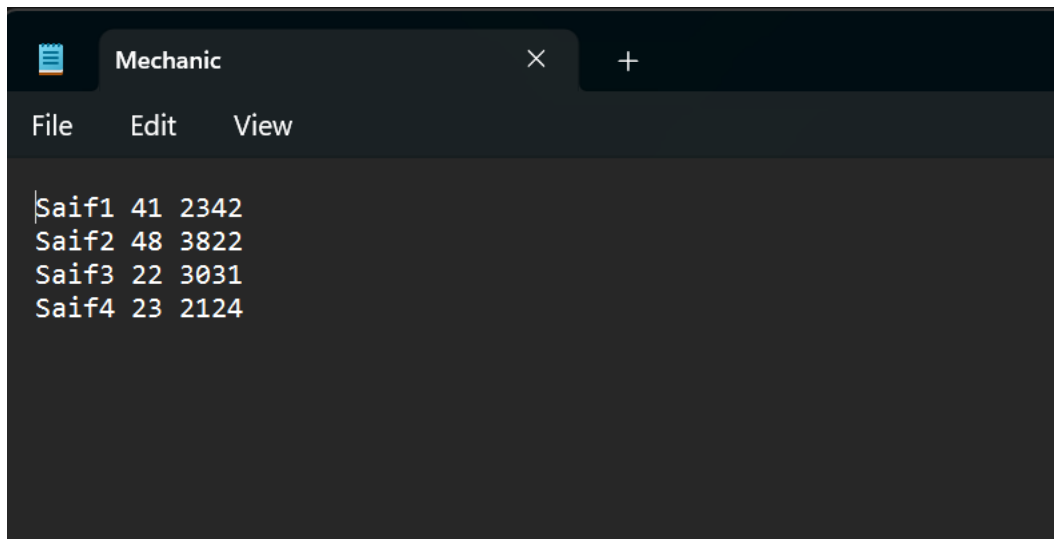


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A screenshot of a code editor window titled "Customer". The window has a dark theme and a menu bar with "File", "Edit", and "View". The main area contains a list of 14 customer records, each consisting of a name followed by four numerical values separated by spaces. The records are: Ahmed1 28 4 36, Ahmed2 20 4 36, Ahmed3 23 3 38, Ahmed4 20 5 39, Ahmed5 39 9 35, Ahmed6 22 15 37, Ahmed7 40 14 36, Ahmed8 33 13 33, Ahmed9 38 13 41, Ahmed10 24 24 28, Ahmed11 44 24 28, Ahmed12 33 24 28, Ahmed13 26 24 28, and Ahmed14 37 24 28.

```
Ahmed1 28 4 36
Ahmed2 20 4 36
Ahmed3 23 3 38
Ahmed4 20 5 39
Ahmed5 39 9 35
Ahmed6 22 15 37
Ahmed7 40 14 36
Ahmed8 33 13 33
Ahmed9 38 13 41
Ahmed10 24 24 28
Ahmed11 44 24 28
Ahmed12 33 24 28
Ahmed13 26 24 28
Ahmed14 37 24 28
```



A screenshot of a code editor window titled "Mechanic". The window has a dark theme and a menu bar with "File", "Edit", and "View". The main area contains a list of 4 mechanic records, each consisting of a name followed by four numerical values separated by spaces. The records are: Saif1 41 2342, Saif2 48 3822, Saif3 22 3031, and Saif4 23 2124.

```
Saif1 41 2342
Saif2 48 3822
Saif3 22 3031
Saif4 23 2124
```

**After reading the two files:**

```
Mr/Mrs. Ahmed1 has appointment with Mr. Saif1 on 4:36
Mr/Mrs. Ahmed2 has appointment with Mr. Saif2 on 4:36
Mr/Mrs. Ahmed3 has appointment with Mr. Saif3 on 3:38
Mr/Mrs. Ahmed4 has appointment with Mr. Saif4 on 5:39
Mr/Mrs. Ahmed5 has appointment with Mr. Saif1 on 9:35
Mr/Mrs. Ahmed6 has appointment with Mr. Saif2 on 15:37
Mr/Mrs. Ahmed7 has appointment with Mr. Saif3 on 14:36
Mr/Mrs. Ahmed8 has appointment with Mr. Saif4 on 13:33
Mr/Mrs. Ahmed9 has appointment with Mr. Saif1 on 13:41
Mr/Mrs. Ahmed10 has appointment with Mr. Saif2 on 22:28
Mr/Mrs. Ahmed11 has appointment with Mr. Saif3 on 22:28
Mr/Mrs. Ahmed12 has appointment with Mr. Saif4 on 22:28
Mr/Mrs. Ahmed13 has appointment with Mr. Saif1 on 22:28
Appointment for Ahmed14 was cancelled.
```

**After Sorting:**

```
Mr/Mrs. Ahmed14 has appointment with no mechanic
Mr/Mrs. Ahmed14 has appointment with no mechanic
Mr/Mrs. Ahmed3 has appointment with Saif3 3:38
Mr/Mrs. Ahmed2 has appointment with Saif2 4:36
Mr/Mrs. Ahmed1 has appointment with Saif1 4:36
Mr/Mrs. Ahmed4 has appointment with Saif4 5:39
Mr/Mrs. Ahmed5 has appointment with Saif1 9:35
Mr/Mrs. Ahmed8 has appointment with Saif4 13:33
Mr/Mrs. Ahmed9 has appointment with Saif1 13:41
Mr/Mrs. Ahmed7 has appointment with Saif3 14:36
Mr/Mrs. Ahmed6 has appointment with Saif2 15:37
Mr/Mrs. Ahmed12 has appointment with Saif4 22:28
Mr/Mrs. Ahmed13 has appointment with Saif1 22:28
Mr/Mrs. Ahmed10 has appointment with Saif2 22:28
Mr/Mrs. Ahmed11 has appointment with Saif3 22:28
```

First the code opened both the customer file and the mechanic file. Then the program assigned each customer to the mechanic in the order the mechanics are stored, so we have 4 mechanics, the first customer Ahmed 1 went to the first mechanic Saif 1, the second customer Ahmed 2 went to the second mechanic Saif 2, and so on till you go back to the I got back to the first mechanic Saif 1 with the customer 5.

To fully test my code, I made the last 5 customers have the same appointment time which is 22:28 . The program assigned the first 4 with the 4 mechanics but there was no fifth mechanic to get assigned to that 5<sup>th</sup> customer, so the program said that its appointment gets canceled accordingly.

After sorting, the program starts with the customers with no mechanic available than listed all such that the customer with an earlier appointment time is stored at the beginning of the queue and then so on till it gets to the customer with the latest appointment stored at the end