

In a newly opened street in a holiday village, the plots are sold continuously, starting from the corner, without any gaps. The buyer can choose the side they want to purchase (they can only buy the next plot on that side) and specify the width of the plot facing the street. Many plots have been purchased in the street, and most of the buyers have already built fences and painted almost all of them.

"The 'kerites.txt' file describes the current state of the street's plots. The plots are listed in the order of purchase. Each line contains three pieces of information. The first number indicates whether the plot is on the even (0) or odd (1) side of the street; the second one specifies the width of the plot in meters (an integer, ranging from 8 to 20); and the third one represents the color of the fence facing the street using a character. The color is represented by uppercase letters of the English alphabet. If the fence has been constructed but not painted, it is represented by the '#' character; if it has not been completed yet, it is represented by the ':' (colon) character. The street's length is at most 1000 meters, and at least 3 plots have been sold on both sides.

```
0 10 P
1 8 K
1 10 :
1 9 S
0 10 P
```

The first plot was purchased on the even side (house number: 2), it is 10 meters wide, and the fence has already been completed, painted in color 'P'. The second buyer is the first to purchase a plot on the odd side (house number: 1), which is 8 meters wide, and it has a fence in color 'K'. The third buyer also chose the odd side, so their house number is 3, and the plot is 10 meters wide, but the fence has not been completed yet.

Create a program that, using the data from the 'kerites.txt' file, answers the following questions! Save the source code of the program under the name 'fence'. (When writing the program, you don't need to check the correctness or validity of the data provided by the user; you can assume that the available data conforms to the description.)

Before displaying the results of subtasks that require writing to the screen, display the task number on the screen (e.g., Task 5:). When requesting input from the user, indicate on the screen what type of value is expected. Accents in text are also accepted.

1. Read and store the contents of the 'kerites.txt' file!
2. Display on the screen how many plots have been sold in the street!
3. Display on the screen that the last sold plot.
 - a. "which (even / odd) side it was found!"
 - b. what house number it received!"
4. Display on the screen a house number on the odd side, where the fence of the adjacent plot is the same color! (The missing and unpainted fences have no color.) You can assume that there is such a plot, and it's enough to display the house number of one of them.
5. Request the house number of a sold plot from the user, and then use it to solve the following tasks!
 - a. "Display the color of the fence corresponding to the house number if it has been completed and painted; otherwise, indicate its condition with the '#' or ':' character!"
 - b. The owner wants to paint or repaint the fence corresponding to the house number. They want to choose a color that is different from the neighbor(s) next to it and the current color. Provide a possible color! You can freely choose the color from the entire palette (A–Z).
6. Display the street view of the odd side in the 'utcakep.txt' file as per the following pattern!

```
KKKKKKKK:::SSSSSSSSBBBBBBBFFFFFFFKKKKKKKKKIIIIIII
1      3      5      7      9      11     13
```

The first row should display the odd side with characters representing the fence color (or condition) for the corresponding meter section! In the second row, starting from under the first character of the plot, the house number should be displayed!