

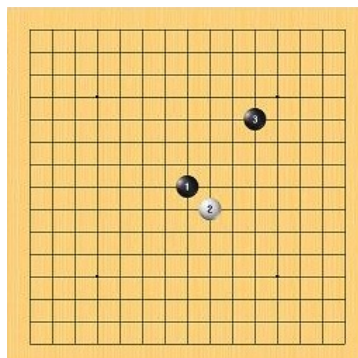
Gomoku



Gomoku is an abstract strategy board game played on a 14 x 14 **GO** board (15 x 15 intersections). Each player places his stone (WHITE or BLACK) on the intersection of the lines on the board. The first person to complete an unbroken chain (horizontally, vertically or diagonally) of exactly 5 stones wins the game. The first player is always at an advantage and to avoid this, we follow the **PRO** rule of Gomoku.

The PRO rule states that,

- An unbroken chain of more than 5 stones are considered over-lines and the game continues.
- The first move must be made exactly on the center of the board (H:8).
- The second move must be made adjacent to the first stone (UP, DOWN, LEFT, RIGHT or any of the 4 diagonals)
- The third move must be made such that the the stone is placed at least 3 cells away from the center of the board (horizontally, vertically or diagonally as shown in the figure).



BLACK goes first.

Input Format

The first line is a string "BLACK" or "WHITE" indicating whether its the 1st player or the 2nd player.

The second line is a string *PRO* which states that the game follows *PRO* format.

The third line is an integer *MOVE* which indicates the move number of the game.

15 lines follow, each line containing 15 characters, each character representing an intersection of the square. An empty intersection is represented by the character '.' (ascii value: 46), the white stone is represented by the character 'W' (ascii value: 87) and the black stone is represented by the character 'B' (ascii value: 66).

The board is indexed left to right from 'A' to 'O' and top to bottom from 1 to 15.

Output Format

Print the index of the board in COLUMN:ROW format. Ex:- A:1, B:2 etc.

Sample Input

```
WHITE
PRO
8
.....
.....W.
.....
.....
.....
.....W.....
.....B.....
.....
.....
```

.....W.B.B..
.....
.B.....
.....
.....

Sample Output

E:3

Resultant Board

.....
.....W..
...W.....
.....
.....
.....
.....W.....
.....B.....
.....
.....
.....W.B.B..
.....
.B.....
.....
.....

Explanation

A move is made by the WHITE player at the position E:3.