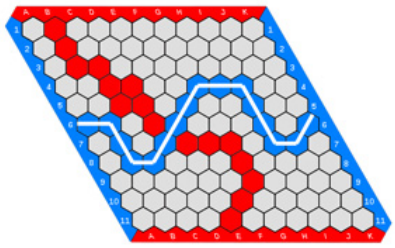
Hex

HEX is a 2-player strategy board game played on a hexagonal grid, theoretically of any size and several possible shapes, but traditionally as a 11×11 rhombus.

Players take turns placing a stone of their color (blue or red) on a single cell within the overall playing board. The goal is to form a connected path of your stones linking the opposing sides of the board marked by your colors, before your opponent connects his or her sides in a similar fashion. The first player to complete his or her connection wins the game. The four corner hexagons each belong to both adjacent sides. (src: wikipedia)

For the first player, the path runs from LEFT to RIGHT and for the second player, the path runs from top to bottom.

A 11×11 hex game board showing a winning configuration for blue is as shown below :



Input format
The first line of the input is either 'B' (ascii value: 66) or 'R' (ascii value: 82) representing the 1st and the 2nd player respectively. Twelve lines follow with the first line containing the integer 11 * and then each line having eleven characters representing a row in the board. An unoccupied hex is represented by '-' (ascii value: 45)

The board is indexed on the top left as "a1" and the bottom right as "k11" - the columns are alphabets and rows are integers.

Output format
Players take turns placing their respective pieces on an unoccupied hex. Print the cell as given format i.e. a character and an integer without any space. For example "c4" is a valid move.

Sample input

```
R
11
R----------
---R-------
B----------
-----B-----
R----------
--------R--
--R--------
--------B--
---B-------
---B-------
---B-------
```

Sample output
b3

Explanation
b3 is 1 step right and 2 steps down from top left. After the move, the configuration of board will be

```
R----------
---R-------
BR---------
-----B-----
R----------
--------R--
--R--------
--------B--
---B-------
---B-------
---B-------
```

Task
Given a board state, output the next move. We have designed the codechecker such that it alternates the control to make a move between the two players. Every submission will have two games - one with you as the first player and the other as second player.

Notes & caveat
As this is a first player win game, we follow a slight variation to the pie rule to make the game fair. The first move of the board alone is decided by the 2nd player.

When the game starts, the board looks like this. The control of making this move is with the 2 nd player.

```
R
11
-----------
-----------
-----------
-----------
-----------
-----------
-----------
-----------
-----------
-----------
-----------
```

Let's say the output is b4, the board state becomes

```
-----------
-----------
-----------
-B---------
-----------
-----------
-----------
-----------
-----------
-----------
-----------
```

The next board state will look like the one below with the control again with the 2 nd player.

```
R
11
-----------
-----------
-----------
-B---------
-----------
-----------
-----------
-----------
-----------
-----------
-----------
```

Let's say the output is b5, the board states becomes

```
R
11
-----------
-----------
-----------
-B---------
-R---------
-----------
-----------
-----------
-----------
-----------
-----------
```

The next board state will be the one below with the control to the 1 st player

```
B
11
-----------
-----------
-----------
-B---------
-R---------
-----------
-----------
-----------
-----------
-----------
-----------
```

It keeps alternating from hereon.

Why do we need the integer 11 in the input?
We plan to design extended versions of this game with other rhombus board sizes and we wouldn't want you to resubmit your code everytime.