Nine Men's Morris

Nine Men's Morris (also known as The Mill Game) is an ancient board game played by 2 players. In this challenge you will code a bot to play the game.

The board consists of 24 points where player can place any of their 9 **men**. The goal of the game is to reduce the opponent to 2 men or prevent the opponent's men from moving. There are two main phases to the game:

- Phase 1 - Players take turns placing their men on open points until all 18 men have been placed.
- Phase 2 - Players take turns moving their men along connected points. A player who connects 3 men in a row (vertical or horizontal) can remove any one of the opponent's men from the board.
- In addition, a player who has only 3 men remaining can "fly" his men around the board and does not need to move through connected vertices.

Input Format

The first line of the input is character 'W' (ascii value 87) or 'B' (ascii value 66) that represents the player. The second line represents the action the player can take, **INIT** or **MILL** or **MOVE**:

- INIT - The player is allowed to place 1 of their men in any of the vacant points.
- MILL - The player is allowed to remove 1 of the opponent's men from the board.
- MOVE - The player is allowed to move 1 of their men to an adjacent point, or if in "fly" mode, to any vacant point.

7 lines follow that represent the state of the board. Vacant points are represented by the character 'O' (ascii value 79). Horizontally and vertically connected positions are represented by '-' (ascii value 45) and '|' (ascii value 124) respectively. The empty slot in the middle is represented by '*' (ascii value 42).

Output Format

During the INIT phase, print the co-ordinate (space separated integers) at which you want to place your men.

For the MILL action, print the co-ordinate from which you want your opponent's men to be removed.

For MOVE phase, print two co-ordinates: The first one for the position you are moving from and the second one for the position you are moving to.

Sample Input

```
W
INIT
O--O--W
|O-O-B|
||OWO||
OOO*OOB
||OOW||
|O-B-O|
O--O--O
```

Sample Output

```
0 3
```

Task

Complete the function *nextMove* which is passed with parameters

- A character player: *W* or *B*
- A String move: *INIT*, *MILL* and *MOVE*
- A String 7*7 board.

Print the output co-ordinates. Each integer separated by space. The board is row indexed from top to bottom and column indexed from left to right. 0<=x,y<7.

Player 1 goes first and is assigned the character W. Player 2 is assigned B.

Scoring

Scoring for two player games is through Bayesian Rating.