Description

Let's write a "medium" level difficulty. Compared to randomly picking a cell to take a move, this level is considerably smarter.

The "medium" level difficulty makes a move using the following process:

1. If it can win in one move (if it has two in a row), it places a third to get three in a row and win.
2. If the opponent can win in one move, it plays the third itself to block the opponent to win.
3. Otherwise, it makes a random move.

Despite the randomness of the third rule, this level is a lot harder to beat. This level stops all simple attempts to beat it due to the second rule, and always wins when it can due to the first rule.

You also should add "medium" parameter to be able to play against this level. And, of course, it should be possible to make "easy" vs "medium" matchup!

Example

The example below shows how your program should work.

```
Input command: start user medium
---------
|       |
|       |
|       |
---------
Enter the coordinates: 2 2
---------
|       |
|   X   |
|       |
---------
Making move level "medium"
---------
|       |
|   X   |
| O     |
---------
Enter the coordinates: 1 3
---------
| X     |
|   X   |
| O     |
---------
Making move level "medium"
---------
| X     |
|   X   |
| O   O |
---------
Enter the coordinates: 2 1
---------
| X     |
|   X   |
| O X O |
---------
Making move level "medium"
---------
| X O   |
|   X   |
| O X O |
---------
Enter the coordinates: 1 2
---------
| X O   |
| X X   |
| O X O |
---------
Making move level "medium"
---------
| X O   |
| X X O |
| O X O |
---------
Enter the coordinates: 3 3
---------
| X O X |
| X X O |
| O X O |
---------
Draw
```

```
Input command: start medium user
---------
|       |
|       |
|       |
---------
Making move level "medium"
---------
|       |
|       |
|   X   |
---------
Enter the coordinates: 2 2
---------
|       |
|   O   |
|   X   |
---------
Making move level "medium"
---------
|       |
|   O   |
| X X   |
---------
Enter the coordinates: 3 1
---------
|       |
|   O   |
| X X O |
---------
Making move level "medium"
---------
| X     |
|   O   |
| X X O |
---------
Enter the coordinates: 1 2
---------
| X     |
| O O   |
| X X O |
---------
Making move level "medium"
---------
| X     |
| O O X |
| X X O |
---------
Enter the coordinates: 3 3
---------
| X   O |
| O O X |
| X X O |
---------
Making move level "medium"
---------
| X X O |
| O O X |
| X X O |
---------
Draw

Input command: exit
```