Antichess

Anti Chess

Antichess*, also called losing chess, loser's chess, zero chess, giveaway chess, suicide chess, take-me chess or reverse chess is a chess variant in which the objective of the participants is to get all of their pieces captured. Thus, your goal is to code a strategy that will make you the best loser in chess.

Rules

We're using a slightly modified rule set as compared to the one in the Wikipedia article:

1. Capturing is compulsory, i.e if in your turn you can capture any of the opponent's piece then you must do so.
2. When more than one capture is available, the player may exercise choice.
3. The king has no special prerogative.
4. The king may be captured like any other piece.
5. There is no check or checkmate.
6. There is no castling.
7. Pawns are not allowed to advance two spaces from their starting position in a single move.
8. They can always only advance one space forward per move.
9. Promotion is not allowed, i.e pawns are not promoted to any other piece when they reach their eighth rank (it's virtually impossible in anti-chess to reach the top)
10. The game is played for maximum of 100 turns, so each of the players get to make at most 50 moves. At the end, the player with the least number of pieces remaining wins the game

Board Representation

The board is represented as :

```
rnbqkbnr
pppppppp
........
........
........
........
PPPPPPPP
RNBQKBNR
```

Lowercase character pieces belong to player1 while the uppercase character pieces belong to player2. In the above board at cell (0, 3) is a bishop of player1, at cell (6, 7) is a pawn of player2 and cell (4, 5) is empty.

Piece Encoding

r/R - Rook
n/N - Knight
b/B - Bishop
q/Q - Queen
k/K - King
p/P - Pawn
. - empty position

Input Format

First line of input contains an integer, 1 or 2, this represents the player.
Then follow 8 lines each containing a string. The ith string represents the ith row of chessboard. These strings represent the current state of the board.

Output Format

Print in a single line four space separated integers, x1 y1 x2 y2. This means that you want to move the piece at cell (x1, y1) to cell (x2, y2)

Sample Input

```
1
rnbqkbnr
pppppppp
........
........
........
........
PPPPPPPP
RNBQKBNR
```

Sample Output

```
0 1 2 2
```

Explanation

The first line of input is 1, means the lower case character pieces are yours. The sample output 0 1 2 2 means that you want to move your knight from cell (0, 1) to cell (2, 2).

So the new board looks like:

```
r.bqkbnr
pppppppp
..n.....
........
........
........
PPPPPPPP
RNBQKBNR
```

PS: Here's a sample code for Anti-Chess which produces random moves: https://gist.github.com/2625140.