

Problem 2: Knights Only

In a standard game of chess, each player begins with a set of six different pieces: one king, one queen, two rooks, two knights, and eight pawns, on an 8×8 grid. In this variant, the game involves only knights.

A knight moves as follows: two squares in one direction, either horizontally or vertically, followed by a move one square in a perpendicular direction. This results in an L-shaped move with a right-angled turn.

If a piece is moved onto another piece it "captures" that piece.

Create a program to determine the number of captures available.

The input consists of 8 lines representing each row of the game board. Each row consists of eight space-separated characters representing each position in that row. Each position is either an o representing your knights, an x representing your opponent's pieces, or a period (.) representing an empty position. Each player may have up to 16 pieces on the board.

Output the number of different opponent pieces that can be immediately captured by any of your knights.

Sample input 1

```
x x . x x x x x
x x . x . x x x
. . . . . . . .
. . . o . . . .
. . . . . . . .
. . . . . . . .
. . . . . . . .
. . . . . . . .
```

Sample output 1

```
0
```

Your knight, in the middle of the board, cannot capture any pieces in a single move.

Sample input 2

```
x x . x x x x x
x x . x x x x x
. . . . o . . .
. . . . . . o
. . . . . . .
. . . . . . .
o o o o o o . o
o . o o o o . o
```

Sample output 2

```
3
```

None of the knights at the bottom of the board can capture any opponent pieces. Your knight in the middle of the board can capture 2 of the opponent pieces in the first row and one piece in the second row. Your knight on the right side can capture one piece on the second row, however it is the same piece the previous knight can capture. Thus, only 3 unique pieces can be captured.