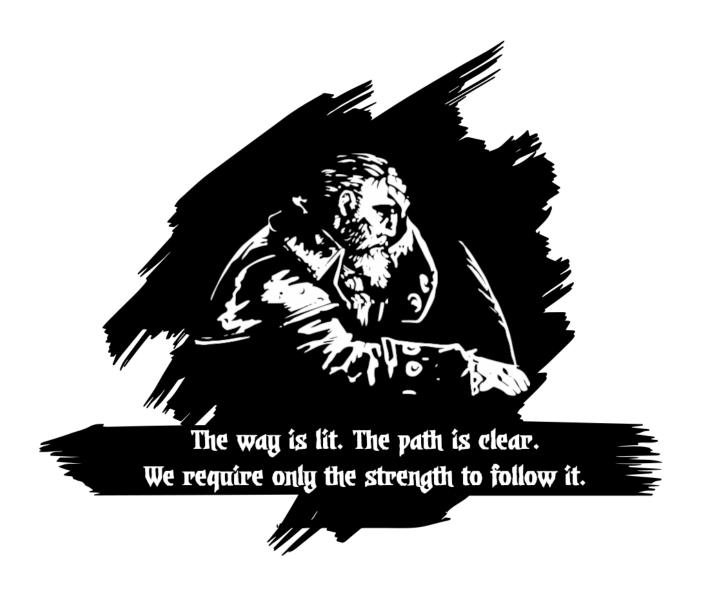


# **Exercises** — Connect4

version #7be580532266ed398481e31366afcc24b1950c2a



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#### File Tree

```
connect4/
connect4.c (to submit)
connect4.h (to submit)
```

Authorized headers: You are only allowed to use the functions defined in the following headers

- err.h
- errno.h
- · assert.h
- stddef.h

**Compilation**: Your code must compile with the following flags

• -std=c99 -pedantic -Werror -Wall -Wextra -Wvla

Main function: None

### 1 Goal

Write a connect4 function returning the number of the winning player in a given grid, or 0 if none of them won or if the grid is not valid (if both players won). For this exercise, we won't take into account the gravity, meaning that you can have flying pieces.

#### **Prototype:**

```
int connect4(const char *game[], size_t columns, size_t lines);
```

game is an array of strings each one representing a line on the grid:

- X when a piece of the player 1 is present
- 0 when a piece of the player 2 is present
- when no piece is present

As a reminder, a player wins when he lines four of his pieces vertically, horizontally, or in diagonal.

The way is lit. The path is clear. We require only the strength to follow it.