

Tic-tac-toe - What is the current state of the game?

In a game of Tic-Tac-Toe, two players take turns marking an available cell in a 3-by-3 grid with their respective tokens (either X or O). When one player has placed three tokens in a horizontal, vertical, or diagonal row on the grid, the game is over and that player has won. A draw (no winner) occurs when all the cells on the grid have been filled with tokens and neither player has achieved a win. More details on the game here : <https://en.wikipedia.org/wiki/Tic-tac-toe>



Problem statement:

Given a string of 'x', 'o' and '-' as input, which represents a game board, print the state of the game as output. The states must be one of:

- X wins
- O wins
- Draw
- Game in progress
- Invalid grid

Examples :

- 1) **X wins** - when X occupies either all cells in a vertical line, or all cells in a horizontal line, or all cells in a diagonal.

Sample Input :

XOXXOOXXO

Which represents the board:

X	O	X
X	O	O
X	X	O

Sample output:

X wins!

- 2) **O wins** - when O occupies either all cells in a vertical line, or all cells in a horizontal line, or all cells in a diagonal.

Sample input:

XOOXOXOXO

Which represents the board:

X	O	O
X	O	X
O	X	O

Sample output:

O Wins!

3) **Draw** - no player has won.

Sample input:

OXOXOXXOX

Which represents the board:

O	X	O
X	O	X
X	O	X

Sample output:

Its a draw!

4) **Game in progress** - if no player has won and its not a draw

Sample input:

XOXX--O--

Which represents the board:

X	O	X
X		
O		

Sample output:

Game still in progress!

5) **Invalid Grid** - a grid that's not possible to achieve in a real game

Sample Input:

XXXO00XXO

Which represents the board:

X	X	X
O	O	O
X	X	O

Sample Output:

Invalid game board

What we are looking for:

Should work correctly. Should pass for all the given sample of Input.

Good to have:

- Good naming
- Object oriented design(OOP)
- Unit tests

It is not expected you to know above mentioned practices or unit testing. But we would like to see what would your best code look like.

Note: That you are not required to develop a UI for this.