

# Homework II: Connect 4



Connect Four is an absorbing and challenging game of vertical strategy that's easy to learn and fun to play. Rules are simple. Each player tries to build a row of four playing pieces in the frame - horizontally, vertically, or diagonally - while trying to prevent his opponent from doing the same.

**Game objective** Be the first player to get four of your checkers in a row - horizontally, vertically or diagonally.

## Game Rules

1. Choose who plays first.
2. Each player in his turn drops one of his checkers down any of the slots in the top of the grid.
3. The players alternate until one of them gets four checkers of his symbol in a row. The four in a row can be horizontal, vertical, or diagonal.
4. The first player to get four in a row wins.
5. If the board is filled and none of the players has four in a row, then the game is a draw.

**Your Task** Implement the “Connect 4” game. Two users would play the game; you can find the game description: <http://www.wikihow.com/Play-Connect-4> There should be no hard coding, the game should be easily expendable to more players and bigger dimensions. We can also easily make “Connect 10” :-).

- Print the board before every input
- Choose 'X' and 'O' instead of the black and red checkers
- Ask the user to input the column on where he wants to insert his checker
  - Check if this move is valid.
  - If the move is valid, check if this move can make the user win
- Alternate between the two users
- Make sure you do error checking of the input.
- NO need to do the actual gravity of the checkers falling.