Kaboom

Pieces and Board: Kaboom is played on a rectangular *i* rows by *j* columns board. The X pieces belong to X-player, and O pieces to O-player. * symbolizes X-player's bomb, while @ symbolizes O-player's bomb. Your implementation must handle an arbitrary number of rows, columns, and number of pieces needed in a row to win. The example game (Figure 1) has 4 rows by 4 with each player only able to place 1 bomb, and needing 4-in-a-row to win. Pieces have been placed on the board.

To Move: The game begins with a blank board. On one's turn, a player "drops" their piece or bomb into a column from the top. It falls vertically until it reaches another piece, or end of the column. On their turn, a player may choose to detonate a bomb instead of dropping a piece, which removes the bomb and all adjacent pieces to the bomb (i.e. left, right, top, bottom pieces). If another bomb happens to be one of the adjacent pieces, it is also detonated. You must move if you can. I.e., If the board is full but has one of your bombs in it, you must detonate it.

To Win:. n number pieces/bombs in a row from the same player causes a win for that player. Pieces or bombs may connect vertically, horizontally, or diagonally. If both players have n-in-a-row as a result of detonation, it is a draw. If the board becomes full with no n-in-a-rows and no bombs remaining to detonate, it is also a draw.

Compulsory Rule Changes:

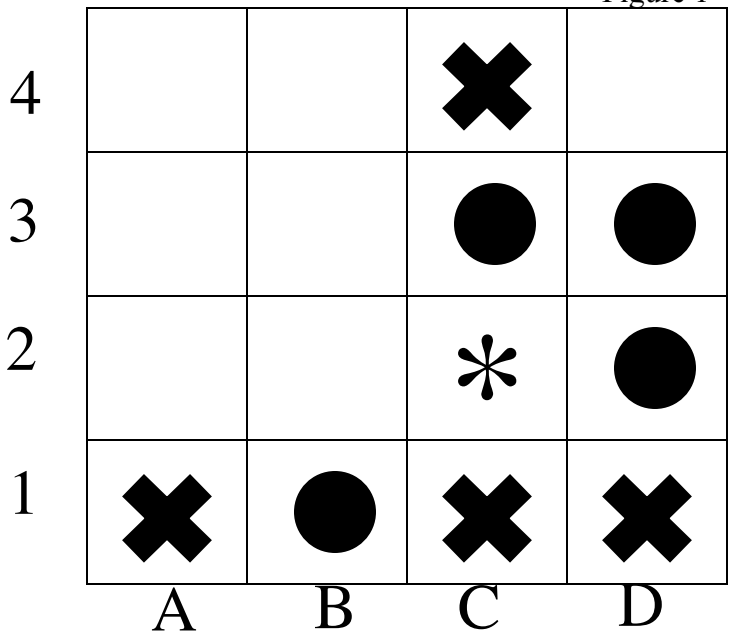
- Misére Rules: The player who connects n pieces loses.
- Super-bomb: bombs remove entire rows and columns

Position Representation:

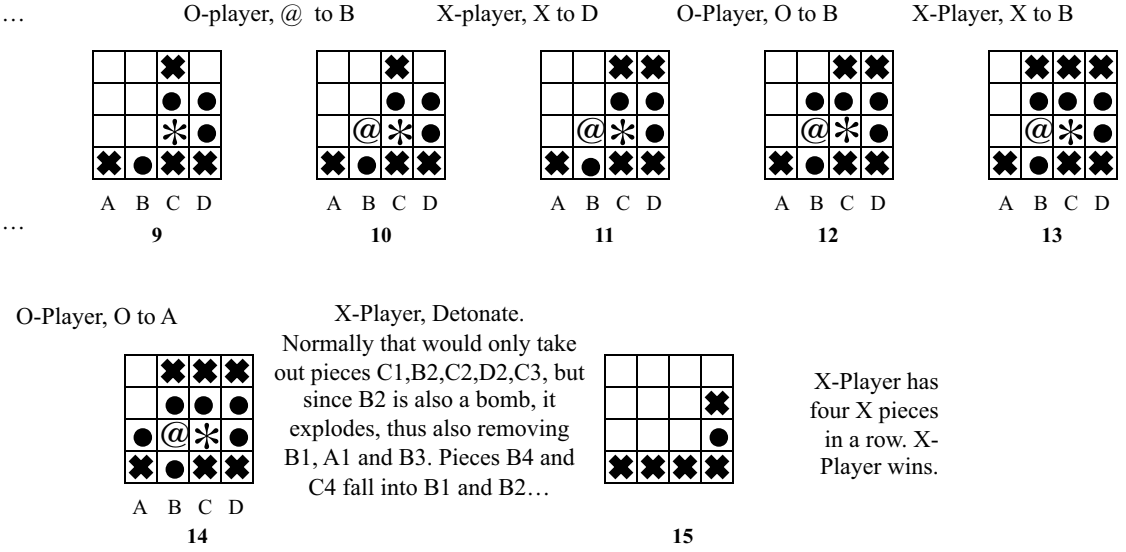
- (*Player xbombsleft obombsleft row row row ...)*

Player stores whose turn it is (x or ○). *xbombsleft* and *obombsleft* store X-player and O-player's number of remaining bombs, respectively. Each *row* is in the form *pppp*... where *p* is "x", "○", "*", or "@", representing the corresponding piece or bomb on the board; "–" if blank.

Figure 1



Example game (we came in late, this is position #9, O to play):



Representation for position 9: `(o 0 1 xoxx --*o --oo --x-)`
…and position #14: `(x 0 0 xoxx o@*o -ooo -xxx)`