

Suppose you have a tic-tac-toe game you are going to represent as a two-dimensional array of int values named *board*.

- How would you represent an O?
- How would you represent an X?
- Write a code segment that creates and initializes a board so that it is ready for someone to make the first move
- Does your board start off with someone winning?
- Suppose r and c are int variables specifying a spot on the board. Write a code segment that checks to see if there is a horizontal win starting at the spot specified by r and c.

Suppose our board is bigger than 3 by 3. Let's say it is m by n . Let's also say to win you need k in a row.

- Write a code segment that checks to see if there is a horizontal win starting at the spot specified by r and c .

- Write a code segment that checks to see if there is a downward win starting at the spot specified by r and c

- Write a code segment that checks to see if there is a down and to the right diagonal win starting at the point specified by r and c.