

Tic Tac Toe

For this assignment, you will create a Tic Tac Toe game using a 2D array. A starter file with empty functions has been provided to you as a suggested program structure, however you do not have to use this starter file. You are free to design and write the game anyway you like, so long as the board is a 2D array and each task is broken down into various functions, and it should look and work as shown below.

When the game starts, the Tic Tac Toe board should be shown. The numbers indicate the available positions to place an X or an O.

```
Tic-Tac-Toe!

  0      X      3
  4      X      0
  7      8      9

Select your move: _
```

At the end of the game, you should indicate who the winner is.

```
Tic-Tac-Toe!

  X      O      X
  O      X      X
  O      X      O

Game is a tie!
```

```
Tic-Tac-Toe!

  1      2      3
  4      5      6
  7      8      9

Select your move: _
```

As plays are made, the numbers are replaced with Xs or Os depending on which player is making the move.

```
Tic-Tac-Toe!

  0      X      3
  4      X      0
  7      X      9

Game Over! X is the winner!
```

If there is no winner, then your program should indicate that the game is a tie.