

# Assignment 7

1. 150 points

Write a program tictactoe.py

The program should play tictactoe against the user.

The program should go first, and display the position to the user after each of the computer's moves.

Input for the player should be as on the previous homework.

Assume that the computer plays 0 and the player plays X

Grading Clarification:

75 points are for whether it plays tictactoe without issue.

75 points are for whether it correctly implements the minimax algorithm to play optimally.

Here's what I get when I play against my program:

```
foster@ix-trusty: ~/Desktop/tictactoe 28$ python3 tictactoe.py
current mini-max result:  0
(' ', '0', '-')
(' ', ' ', '-')
(' ', ' ', '-')
0 0
('X', '0', '-')
(' ', ' ', '-')
(' ', ' ', '-')
current mini-max result:  0
('X', '0', '-')
(' ', ' ', '-')
('0', ' ', '-')
1 1
('X', '0', '-')
(' ', 'X', '-')
('0', ' ', '-')
current mini-max result:  0
('X', '0', '-')
(' ', 'X', '-')
('0', ' ', '0')
2 1
('X', '0', '-')
(' ', 'X', '-')
('0', 'X', '0')
current mini-max result:  0
('X', '0', '-')
```

```
('-', 'X', 'O')
('O', 'X', 'O')
0 2
('X', 'O', 'X')
('-', 'X', 'O')
('O', 'X', 'O')
current mini-max result:  0
('X', 'O', 'X')
('O', 'X', 'O')
('O', 'X', 'O')
foster@ix-trusty: ~/Desktop/tictactoe 29$
```

As you can see, I also displayed the current correct result.  
You can do that too, if you like.  
Also, I found it easier to write my own function  
to print out the board which makes it look nicer.