

## Files to submit: **connect4.py**, **ReadMe.txt**

1. For this assignment you will be implementing the game connect 4. Connect 4 is played on a 6 X 7 grid and the goal is to get four of your pieces in a row: either vertically, horizontally, or diagonally. If you have never played Connect 4 before you can play a game [here](#).
  1. Specifications
    1. No modules may be imported
    2. No global variables
    3. Input is not guaranteed to be valid. If invalid input is entered you should request that the player enter their input again
      1. Valid input is considered to be a number between 0 – 6 specifying which column to place a piece in
      2. A piece cannot be placed in a column that is filled
    4. Player 1 is represented by the character X and Player two is represented by the character O
      1. Blank spaces are represented by \*
    5. The game is over if either player gets 4 pieces in a row or the entire board becomes full and neither player has won.
      1. If a player wins you should say, "X won the game." if X won the game and "O won the game" if O won the game.
      2. If there is a tie game you should say, "The game ended in a tie."
  2. An example game is shown below

```
5 * * * * * * *
4 * * * * * * *
3 * * * * * * *
2 * * * * * * *
1 * * * * * * *
0 * * * * * * *
  0 1 2 3 4 5 6
```

X please enter a move: 3

```
5 * * * * * * *
4 * * * * * * *
3 * * * * * * *
2 * * * * * * *
1 * * * * * * *
0 * * * X * * *
  0 1 2 3 4 5 6
```

O please enter a move: 2

```
5 * * * * * * *
4 * * * * * * *
3 * * * * * * *
2 * * * * * * *
1 * * * * * * *
0 * * O X * * *
  0 1 2 3 4 5 6
```

X please enter a move: 1

```

5 * * * * *
4 * * * * *
3 * * * * *
2 * * * * *
1 * * * * *
0 * X O X * *
  0 1 2 3 4 5 6

```

O please enter a move: 4

```

5 * * * * *
4 * * * * *
3 * * * * *
2 * * * * *
1 * * * * *
0 * X O X O *
  0 1 2 3 4 5 6

```

X please enter a move: 2

```

5 * * * * *
4 * * * * *
3 * * * * *
2 * * * * *
1 * * X * *
0 * X O X O *
  0 1 2 3 4 5 6

```

O please enter a move: 3

```

5 * * * * *
4 * * * * *
3 * * * * *
2 * * * * *
1 * * X O *
0 * X O X O *
  0 1 2 3 4 5 6

```

X please enter a move: 3

```

5 * * * * *
4 * * * * *
3 * * * * *
2 * * * X *
1 * * X O *
0 * X O X O *
  0 1 2 3 4 5 6

```

O please enter a move: 4

```

5 * * * * *
4 * * * * *
3 * * * * *

```

```
2 * * * X * * *
1 * * X O O * *
0 * X O X O * *
  0 1 2 3 4 5 6
```

X please enter a move: 5

```
5 * * * * * * *
4 * * * * * * *
3 * * * * * * *
2 * * * X * * *
1 * * X O O * *
0 * X O X O X *
  0 1 2 3 4 5 6
```

O please enter a move: 4

```
5 * * * * * * *
4 * * * * * * *
3 * * * * * * *
2 * * * X O * *
1 * * X O O * *
0 * X O X O X *
  0 1 2 3 4 5 6
```

X please enter a move: 4

```
5 * * * * * * *
4 * * * * * * *
3 * * * * X * *
2 * * * X O * *
1 * * X O O * *
0 * X O X O X *
  0 1 2 3 4 5 6
```

X won the game.