Artificial Intelligence for Robotics - Assignment 10

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For this assignment, you can work in a team of two. Each one in the team should be able to present all submitted material.

1. Implement a simple *Connect 4*[1] game to demonstrate the use of adversarial search for deterministic, fully observable, two player turn-taking zero-sum games.

   For the adversarial search problem, implement a *minmax* and *alpha-beta pruning* agent that allows you to play against the computer and/or the two algorithms against each other.

   Compare these two approaches based on their search time, space requirement and other information that you think is important. What was your evaluation function to rate the board?

   You need not implement a nice GUI. A simple console interface like below is sufficient:

```
. . . . . . .
. . . . . . .
. . . . . . .
. . X . . . O
X O X O . . O

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1 2 3 4 5 6 7

$ > next move (1-7): _
```

[1] http://en.wikipedia.org/wiki/Connect_Four