# Write up

Team Name: SyntaxError

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#### Overview

This version of SyntaxErrorAI uses the minimax search algorithm along with a depth cut-off, an evaluation function, and alpha-beta pruning. It is capable of playing against a human or another AI in any size board and for any value of K.

### **Minimax**

This minimax search algorithm can generate different gamestates of the game and return the move with the "best" outcome.

## **Depth cut-off**

The depth cut-off is a variable that keeps track of the depth of the minimax search. It can be adjusted to set any desired depth limit.

### evaluation function

The current evaluation function assigns scores based on how close the current player is to connecting K pieces together.

### Alpha-beta pruning

It avoids searching game states that won't result in a good outcome.