

### Report on 4x4 game board without alpha-beta pruning

Result of the running full minimax:

(-8, [(('B', 0, 2), ('W', 0, 3), ('B', 1, 3), ('W', 0, 1), ('B', 3, 0), ('W', 2, 3), ('B', 0, 0), ('W', 3, 2), ('B', 3, 3), ('W', 3, 1), ('B', -1, -1))])

('B', -1, -1) is the terminal state.

White player is always the winner, because white player gets to make the last possible move on the board, thus getting the most value.

The number of terminal states that are encountered in the process of running **minimax** at the top level is 60062

Runtime is ~ 24 seconds

### Report on 4x4 game board with alpha-beta pruning

Runtime is~ 17 seconds

### Report on 5x5 game board with alpha-beta pruning

Runtime ~ 25 seconds

No one is the winner for 5x5