Reversi Lab Write-Up

2a. Describe your pruning and evaluation function.

As soon as the AI receives the updated state from the server, it develops a full tree of potential moves where each child node is a potential move if the parent node’s move were taken by the other player. Each child is assigned a move by its parent and contains a full representation of the state up to the move taken by its parent. While a full tree is built out at each turn, relatively few are explored by the alpha-beta pruning algorithm. The value of a given child is determined by a score assigned to the child’s move in addition to the impact of all of its successive ancestors. Every position on the board has a predetermined weight, if the move causes the player’s token to occupy that position then its weight is summed into the move’s overall score.

2b. Time spent

Clay Coleman: 6 hours

Eric Fortney: 6 hours

2c. Report evaluating algorithm.