## alpha beta

I have set my default search depth for alpha beta to a depth of 10, doing this it plays fairly well there is a very slight 'hiccup' between me making my move and the agent making its move though I have noticed. This 'hiccup' is much more noticeable when the search depth is increased to 15 or even when increased slightly to 12. Though the agent seems to play at about the same performance. This is also true when decreasing the search depth to 8. I would say using 8-10 for search depth is optimal to keep the game going faster as well as the most optimal performance from the agent.

## mcts

 setting the optimal C value to the square root of 2 has performed pretty well for my agent. changing the c value to 0 and only going by the wins to games ratio i can tell it performs slightly worse. While changing the c value to something like 10 also seems to make the performance of the agent slightly worse.

## comparing performance of all 3 agents

After playing against all 3 agents I have noticed that my MCTS agent, (with c value of square root of 2), has definitely performed the best with hybrid agent slightly edging out the alpha-beta agent when it comes to performance. I think this would most likely be because of the way I am giving each node a score in the alpha-beta method, this scoring method could definitely be optimized further with more time spent on that.