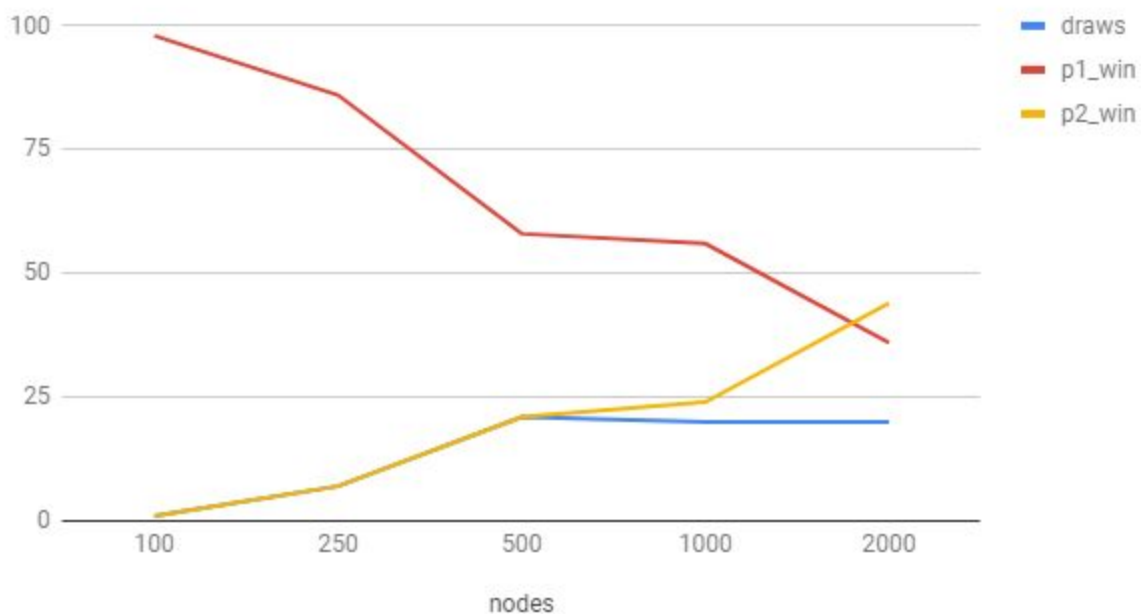


Experiment 1: Authored by Myron Pow

time(seconds)	nodes	draws	p1_win	p2_win
2229.050789	100	1	98	1
2346.076482	250	7	86	7
2835.254257	500	21	58	21
3809.187317	1000	20	56	24
4440.291784	2000	20	36	44

Wins by number of exploratory nodes(P1, 1000 P2 varies)



Results are interesting to say the least.

At 100 p2 nodes, the p1 bot had an overwhelming winrate, as expected.

At 250 nodes, the p1 bot is still winning over p2, but at least P2 isn't flopping over and dying

At 500 the P1 bot is still showing a clear lead, but P2 is at least putting up a fight.

At 1000 however, the P1 to P2 shows similar results to the 500, which seems to imply that the bot is actually not finding any better solutions inside the extra 500 nodes

This would seem to imply that a first player advantage exists, similar to card games, and thus, without mitigating factors like extra cards or extra 'intelligence' P1 should win more than P2.

At 2000 nodes, the P2 bot finally overtakes the P1 bot, but it took twice as many nodes visited to sort out this action. Given the tight margins however, I hesitate to quantify the first player advantage as 1000 nodes. I'd run another 400 simulation games for this but at 1:15h per run, there is no such time.