#	******													
#	Playing Matches													
#	**********													
#														
#	Match #	Opponent	AB_Improved			AB_Custom			AB_Custom_2			AB_Custom_3		
#			Won	Los	st	Won	:	Lost	Won]	Lost	Won]	Lost
#	1	Random	10	()	9		1	8		2	8		2
#	2	MM_Open	5	5	5	5		5	6		4	7		3
#	3	MM_Center	9	1	L	10		0	9		1	9		1
#	4	${\tt MM_Improved}$	6	4	1	4		6	3		7	3		7
#	5	AB_Open	5	5	5	5		5	4		6	5		5
#	6	AB_Center	6	4	1	7		3	3		7	5		5
#	7	AB_Improved	4	6	5	6		4	7		3	6		4
#														
#		Win Rate:	64.3%			65.7%			57.1%			61.4%		

AB_Custom

In addition to maximizing own moves while minimizing opponent's moves, we prefer moves that result in more overlapping moves because it gives a higher chance to block opponent's moves.

AB_Custom_2

Custom 2 is similar to the AB_Improved but we amplify the effect of the difference between the number of player's and opponent's moves. By taking a square between the difference allow us to distinguish between 2 vs 1 and 5 vs 4. Custom 2 will prefer moves that generate more opportunities for player.

AB_Custom_3

Be more aggressive as we progress in the game.

CONCLUSION

AB_Improved had a win rate of 64.3% while the best performing evaluation function, AB_Custom, won 65.7% fo the time. The other two AB_Custom_2 and AB_Customer_3 won 57.1% and 61.4%.

AB_Custom is recommended because:

1. it achieved the best win rate of 65.7%

- 2. it has minimum memory space requirement as it does not require information from previous moves besides the global state of which spot is taken.
- 3. it is easy to implement
- 4. the game of isolation is to stop opponent from moving so going where the overlapping moves are will increase the chance of blocking.