Heuristic_analysis

custom_score

```
my_moves = len(game.get_legal_moves(player))
opp_moves = len(game.get_legal_moves(game.get_opponent(player)))
return 1.5 * float(my_moves * my_moves - opp_moves * opp_moves)
```

custom_score_2

```
my_moves = len(game.get_legal_moves(player))
opp_moves = len(game.get_legal_moves(game.get_opponent(player)))
return 1.5 * float((my_moves -opp_moves)/ (opp_moves + .000001)) - 1.5 *
float((opp_moves -my_moves)/ (my_moves + .000001))
```

custom_score_3

```
my_location = game. get_player_location(player)
opp_location = game.get_player_location(game.get_opponent(player))
my_moves = len(game.get_legal_moves(player))
if my_location and opp_location:
    return float(abs(sum(my_location) - sum(opp_location))) + my_moves
elif opp_location:
    return float("-inf")
else:
    return float("inf")
```

Results

Match #	Opponent	AB_Improved		AB_Custom		AB_Custom_2		AB_Custom_3	
		Won	Lost	Won	Lost	Won	Lost	Won	Lost
1	Random	10	0	8	2	9	1	9	1
2	MM_Open	9	1	7	3	8	2	5	5
3	MM_Center	8	2	7	3	8	2	9	1
4	MM_Improved	7	3	4	6	5	5	6	4
5	AB_Open	8	2	4	6	4	6	5	5
6	AB_Center	3	7	5	5	6	4	5	5
7	AB_Improved	5	5	4	6	5	5	7	3
	Win Rate:	71.4%		55.7%		64.3%		65.7%	