```
                 ************************
                     Playing Matches
                 ************************
```

Match #	Opponent	AB_Improved		AB_Custom		AB_Custom_2		AB_Custom_3	
		Won	Lost	Won	Lost	Won	Lost	Won	Lost
1	Random	1	9	4	6	9	1	2	8
2	MM_Open	7	3	10	0	10	0	10	0
3	MM_Center	9	1	10	0	10	0	10	0
4	MM_Improved	6	4	10	0	10	0	10	0
5	AB_Open	3	7	6	4	5	5	4	6
6	AB_Center	1	9	7	3	4	6	2	8
7	AB_Improved	7	3	9	1	9	1	10	0

```
--------------------------------------------------------------------------
         Win Rate:    48.6%        80.0%        81.4%        68.6%
```

Your ID search forfeited 184.0 games while there were still legal moves available to play.

The above is the output for my test run.

There are three heuristics I developed.
1. The first one gives a single positive value for a move which is not in one of the legal moves of the opponent. This will always help in creating a path for the player such that he will have the widest possible steps. However the issue with the approach is the second step can still point to the possible steps of the opponent.
2. This is a very straight forward definition of the maximum possible moves for the for the player without considering the opponent. This works like an escape artist but not as an aggressive player. The simplicity of the approach gave the biggest win percentage.
3. This one gives a high value to being in the center. For all possible moves the score is greater if the legal moves are closer to the center. AS they move away, the number becomes less. This helps in ensuring that legal moves which are closer to the centre get more score. So a move which has more choices to the centre will have higher score.

The second choice works best at all times because of the following reasons…
1. In the first case, it is possible to create an approach to box the player. As an example consider a position which gives 2 moves in the immediate level (a,b) but a different one which has (c,p). If 'a' is common for both player and opponent, then a is not counted. Only b will be counted and so both the move with 2 options and the move with ('c',p) will not get same score. The next move of c and p can lead to a terminal move.
2. The third approach gives more weight towards being in center. But the challenge is more moves towards the endge and less moves to centre will give the same score. It can be misleading to think that the move is better.
3. Another issue with the third approach can be seen doing the end process. When the centre biomes crowded will strikes, It is possible that the system will lean towards going to a place where there is little of moving to the next level. I think if this can be modified to go a few level deeper, the scoring will be must better.