The main implementation of all three custom 1,2 and 3 area as follows:

```
min_open_move_score = 0.0 min_improved_score = -7.0 min_center_distance = 0.5
max_open_move_score = 7.0 max_improved_score = 7.0 max_center_distance = 40.5

_open_move_score = open_move_score(game, player) _improved_score =
improved_score(game, player) _center_distance = center_score(game, player)

if _open_move_score < 0: _open_move_score

elif _open_move_score > 7: _open_move_score = 7

if _improved_score < -7: _improved_score = -7

elif _improved_score > 7: _improved_score = 7

if _center_distance < 0.5: _center_distance = 0.5

elif _center_distance > 40.5: _center_distance = 40.5

_open_move_score = get_equal_scale(_open_move_score, min_open_move_score,
max_open_move_score) _improved_score = get_equal_scale(_improved_score,
min_improved_score, max_improved_score)

_center_distance = get_equal_scale(_center_distance, min_center_distance,
max_center_distance)
```

then for custom 1 I got as follows:

```
score = ((_open_move_score) ** 2 + (_improved_score) ** 2 + (_center_distance *
0.5) ** 2) ** (0.5)
```

for custom 2 I got as follows:

```
score = ((_open_move_score) ** 2 + (_improved_score) ** 2 + (_center_distance *
0.5) ** 2) ** (0.5)
```

and for custom 3 I got as follows:

```
score = (_open_move_score + _improved_score + _center_distance )
```

the results are as folows:

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

Match #   Opponent    AB_Improved   AB_Custom   AB_Custom_2  AB_Custom_3
                       Won | Lost   Won | Lost   Won | Lost   Won | Lost
   1       Random      10  |   0    10  |   0    10  |   0     9  |   1
   2       MM_Open     10  |   0     8  |   2     7  |   3     9  |   1
   3      MM_Center     9  |   1    10  |   0    10  |   0    10  |   0
   4     MM_Improved    8  |   2     8  |   2     8  |   2     6  |   4
   5       AB_Open      8  |   2     6  |   4     4  |   6     2  |   8
   6      AB_Center     6  |   4     6  |   4     7  |   3     6  |   4
   7     AB_Improved    6  |   4     6  |   4     6  |   4     2  |   8
--------------------------------------------------------------------------
          Win Rate:      81.4%        77.1%        74.3%        62.9%
```

The process for getting the best score was iterative but first I had to adjust the scale of `_open_move_score , _improved_score, _center_distance` to an equivalent and apropiate scale. Finally I evaluate the best score