

Visualizing Chess Games

ChessLib

Chess

Using ICCF Notation See https://en.wikipedia.org/wiki/ICCF_numeric_notation

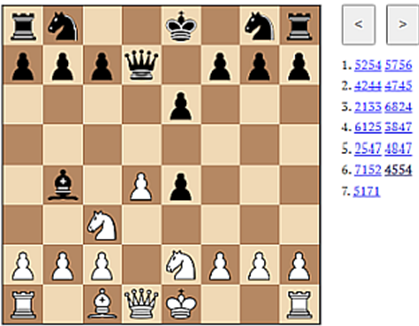
```
Choose colors for the board and pieces:  cl :=[ "white" "#55335588" "#FF222222" "black" ]
                                         cl =[ WhiteSq BlackSq WhitePz BlackPz ]
```

Moves are in ICCF notation. There are some online converters from where you can paste a PNG match in algebraic notation and convert it into ICCF, like:

<http://marianogappa.github.io/ostinato-examples/convert>

This is the example from this site, pasted into the description of some variable. Then call Chess(str,move,sz ,cl) where sz is the pieces size. White moves are integers, Black moves ends with .5.

Converted match

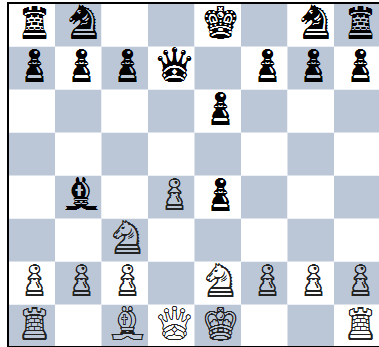


18	28	38	48	58	68	78	88
17	27	37	47	57	67	77	87
16	26	36	46	56	66	76	86
15	25	35	45	55	65	75	85
14	24	34	44	54	64	74	84
13	23	33	43	53	63	73	83
12	22	32	42	52	62	72	82
11	21	31	41	51	61	71	81

1. 5254 5756
2. 4244 4745
3. 2133 6824
4. 6125 3847
5. 2547 4847
6. 7152 4554
7. 5171

Game := 1

move := 6.5



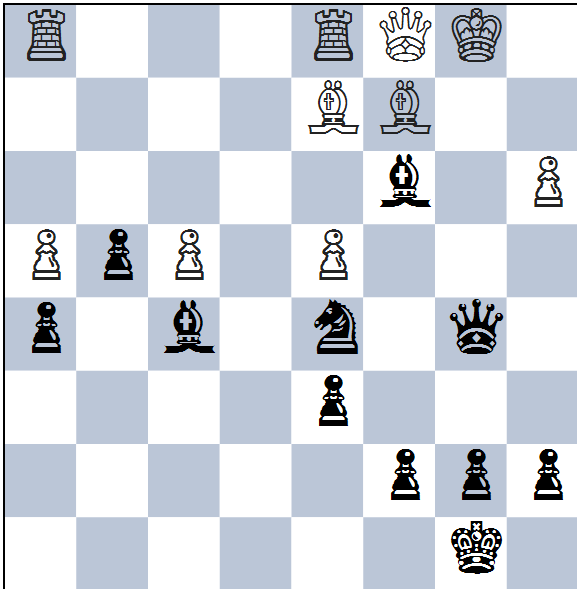
Visualizing mathches Match from https://en.wikipedia.org/wiki/Uruguayan_Immortal

1. 4244 7866
2. 7163 4745
3. 3234 3736
4. 2133 2847
5. 5253 5756
6. 6143 4534
7. 4334 2725
8. 3443 1716
9. 5171 3635
10. 2223 3827
11. 4152 4826
12. 6141 6857
13. 1214 2524
14. 3321 1838
15. 2142 3544
16. 4234 2617

17. 6344 5878
18. 3142 1615
19. 4425 1718
20. 2546 2772
21. 4638 6838
22. 4151 7263
23. 5261 1845
24. 5354 3834
25. 2334 4585
26. 4264 6674
27. 4352 4755
28. 8283 5735
29. 6473 7462
30. 7362 8575
31. 7182 7564
32. 6273 3571
33. 6171 5574

Game := concat (description (G1), description (G2))

move := 30.5



A negative value as moove turns the board. Notice also about the blank line if split the stings. Pawn promotion isn't implemented yet.

This is a more elaborate example. The string of the analitic notation is in the description of GameA, and the ICCF in the other variable.

```
GameA := 1      GameICCF := 1      moves := stack(0, [1, 1.5..65.5])
```

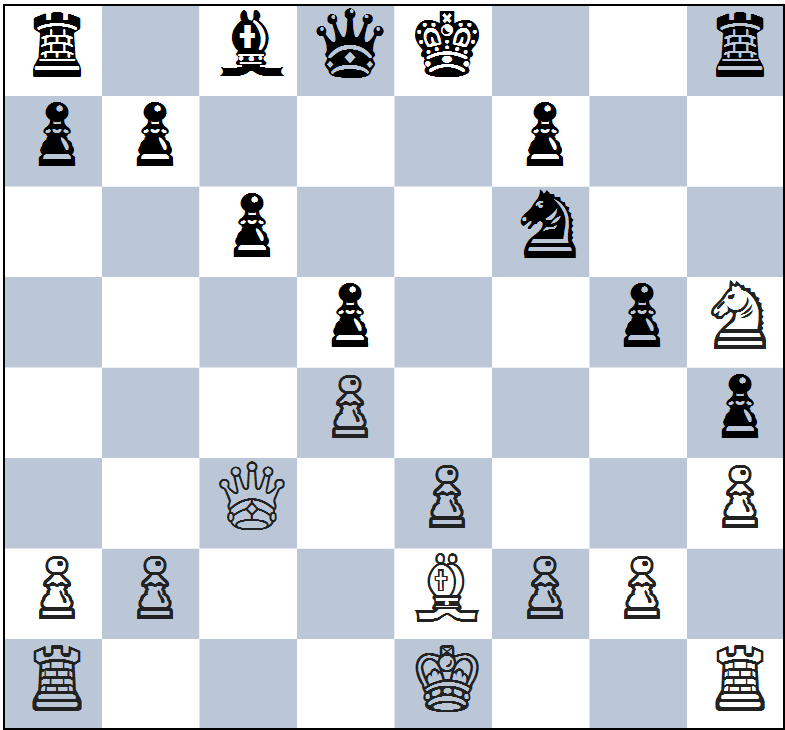
Magnus Carlsen vs Ian Nepomniachtchi
Magnus Carlsen Invitational (2021) (blitz) (0-1)

15.5

Current move:

"15. Qxc3 Nf6" 2333 4766

15. Qxc3 Nf6	2333	4766
16. Nxf6+ Qxf6	8566	4866
17. b4 a6	2224	1716
18. a4 Bf5	1214	3865
19. b5 axb5	2425	1625
20. axb5 0-0	1425	5878
21. 0-0 Qe6	5171	6656
22. Rc1 cxb5	6131	3625
23. Qb3 Rxa1	3323	1811
24. Rxa1 Rc8	3111	6838
25. Bf3 Be4	5263	6554
26. Bxe4 Qxe4	6354	5654
27. Qxb5 Rc7	2325	3837
28. Qb6 Qe7	2526	5457



Chess (description (GameICCF), move, 28, cl)

Visualizing positions

This is the original purpose, for problems in probabilistics and discrete maths. Chess (W,B,sz,cl) plots the position given the White and Black information as vectors with the places of the pieces as integers and the piece kind given by a number 1 to 6 for Q, R, B, H, P, K as the decimal part. You can define both vectors manually, or get them calling

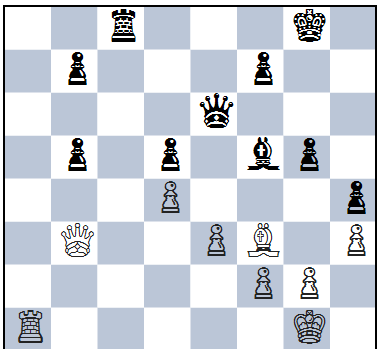
```
[ W B ] := Chess (description (GameICCF), 25, 0, 0)

[ W ] = [ [ 23.1 71.6 63.3 11.2 44.5 53.5 62.5 72.5 83.5 ]
B ]     [ [ 65.3 56.1 78.6 38.2 27.5 25.5 45.5 67.5 75.5 84.5 ] ]
```

For example

B₅ = 27.5 is that pawn ->

W₄ = 11.2 is that rook ->



18	28	38	48	58	68	78	88
17	27	37	47	57	67	77	87
16	26	36	46	56	66	76	86
15	25	35	45	55	65	75	85
14	24	34	44	54	64	74	84
13	23	33	43	53	63	73	83
12	22	32	42	52	62	72	82
11	21	31	41	51	61	71	81

Chess (W, B, 14, cl)