TestChess

Below are lists of sample tests we used to manually test our chess game.

Test promotion (and graveyard count)

Move d 7 d 5
Move d 2 d 3
Move d 5 d 4
move c 2 c 4
move d 8 d 7
move c 4 c 5
Move d 7 e 6
Move e 2 e 3
move d 4 e 3
move d 1 b 3
move e 3 f 2

move e 3 f 2

move f 2 g 1 (Finish moving pawn across the board)

Make queen (**Tested promotion of other ranks here**, ie. Cannot promote to king/pawn/dinosaur/etc., but can promote to rook/bishop/knight)

Test castling

Long castle: white

Move b 8 c 6

move h 2 h 3

Move d 7 d 6

Move h 3 h 4

Move c 8 f 5

move h 4 h 5

move d 8 d 7

move h 5 h 6

Castle a 8 e 8 (valid castle)

Move b 8 c 6

move h 2 h 3

Move d 7 d 6

Move h 3 h 4

Move c 8 f 5

move h 4 h 5

move d 8 d 7

```
move h 5 h 6
move e 8 d 8
move g 2 g 3
Move d 8 e 8
Move g 3 g 4
Castle a 8 e 8 (invalid castle: king is_first_move is false)
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castle a 8 e 8 (**invalid castle:** pieces in between)

Short castle: white

move g 8 h 6 move g 2 g 3 move e 7 e 5 move g 3 g 4 move f 8 a 3 move g 4 g 5 castle e 8 h 8 (valid castle)

Test en passant

move e 7 e 5 move a 2 a 3 move e 5 e 4 move d 2 d 4 move e 4 d 3

Test check

move e 7 e 5 move g 1 f 3 move e 5 e 4 move f 3 d 4 Move e 4 e 3 Move d 4 f 5

Move e 3 f 2 (**Should be in check:** Check that pawn is_check is correct direction) Move f 5 d 6 (**Should not work:** check that you can't get out of check with double check)

move e 7 e 5 move g 1 f 3 move e 5 e 4 move f 3 d 4 Move e 4 e 3 Move d 4 f 5

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Move e 3 f 2 (Should be in check)
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Move e 1 f 2 (**Get out of check**)

Move e 8 e 7 (**Should not work:** moving into check)

Move e 7 e 5

Move f 2 f 4

Move d 8 g 5

Move e 2 e 3

move g 5 g 3 (Should be in check)

Test checkmate

move e 7 e 5

move f 2 f 3

move q 8 f 6

move h 2 h 3

move f 6 e 4

move f 3 f 4

move d 8 h 4 (Should be in check: can block check, so not checkmate yet)

Move g 2 g 3 (Block check)

Move h 4 g 3 (Should be in checkmate)