To start a game you enter the names of (white) and (black).

You could have the computer be (white), (black) or both.

The first command is for (white), if you would like it to be the computer, you leave it blank and press enter, otherwise you could enter a player name followed by enter

The same goes for (black).

Once in a game you enter your moves as follows:

Current piece coordinate to be moved, followed by a space and its move location

Example:

e2 e4

When invalid moves are played, the program notifies the player of the error and allows the player to try again.

When a piece is in check, the program notifies the player of this.

When checkmate is detected, the program returns the name of the winning player.

To castle, you simple enter the coordinates of the new king move location. The standard notation of O-O and O-O-O are also supported.

To promote a pawn when it reaches the top square, you enter the first letter of the piece to be promoted to (q for queen, r for rook...) pawn promotion is required when a pawn reaches the top cell as per the rules of chess.

En passant is supported as well.

The program only produces text output, and only one level of difficulty has been implemented.

Smart pointes were implemented throughout.

A sample game is included and titled millsVsOhguist.txt

This is an impressive chess game won by checkmate in only 13 moves.

To run this match, you could use input redirection as shown here below.

./chess < millsVsOhquist.txt