
Deduce
Deduce
Click Here To Play
Duffer
Connected
Resign
1 G1 A4
2 F7 C5
3 D2
4
Algebraic
Sets
Games
Human
Computer
Win: 4
Loss: 8
Ratio: .5%

DEDUCE

Grand Master

James Schiiller

Deduce Grand Master

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INTRODUCTION

This book is created for people who have purchased the grand master edition of deduce. Its purpose is to introduce people to the game of deduce. The book explains where the game came from, how to play, and most invaluably, how to improve your deduce skills.

Online: go to my website: **deduce.online**.

21RST CENTURY TIC-TAC-TOE

Tic-Tac-Toe was good in the 20th century; however, it is too easy today. People need something to replace it with, that is a little more challenging, but not too hard. A quick game you can play while you're waiting at the dentist's office. Deduce is faster than Tic-Tac-Toe, but as complicated as chess. It has a maximum of eight moves and requires you to think. Thinking games are better for your mind than shoot 'em up type games.

Deduce is a cross between the games of Tic-Tac-Toe, Chess, and Nim. It only takes a few seconds to learn and a lifetime to master, unless you have this book. We think that there are only about five people in the world who can figure out deduce and draw the grand master in a set, without a computer, i.e. Based on the Eight Queens chess problem but taking it further. Deduce here means figure it out.

ORIGINS OF THE GAME

Deduce is the brainchild of a FIDE Chess Master [1]. The idea may have been started as a class assignment, if the author recalls correctly, and expanded into something more serious. The idea was also to have organized tournaments and also make computer players online to test your skill against, if you couldn't find anyone to play against. Deduce is also known as Egyptian Checkers [1]. The author [2] came up with the idea of Deduce Study function, where you can study and analyze deduce to improve your skill.

HOW TO PLAY

You can read the rules and still not know how to play. So this short chapter gives the rules and then explains how to actually play.

RULES OF THE GAME

Summary

DEDUCE is a two-player game designed from the traditional 8 queen puzzle.

Two players compete by alternately placing a QUEEN on a square not in the same row, column, or diagonal of another QUEEN (i.e., not being controlled by another QUEEN of either side.)

Last player to fill the board, taking the last available square, wins the game.

Rules

1. The winner is the last player that makes a legal move.

2. A legal move is made on a square with completely empty rows, columns, and diagonals.

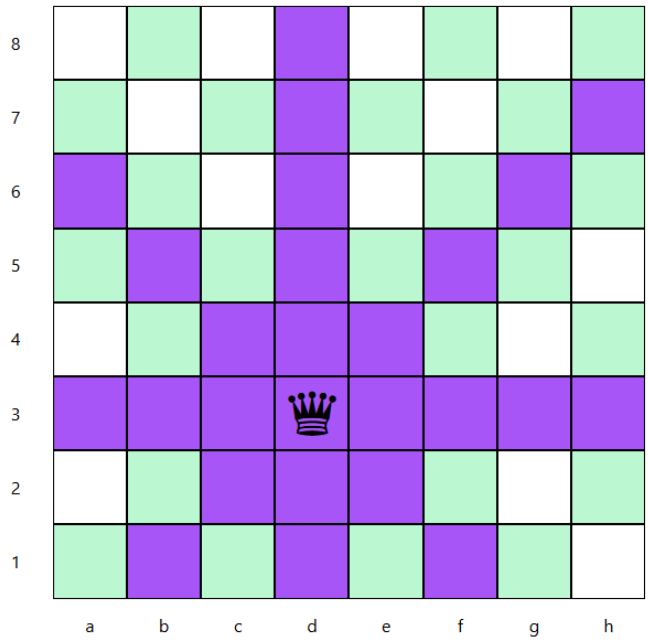
3. Moves alternate between the first (odd) player and second (even) player.

Match Scoring

Deduce Matches consists of alternating the first game move between the players, the first player to win six games and ALSO be ahead by a margin of 2 games wins (Tennis is scored the same way).

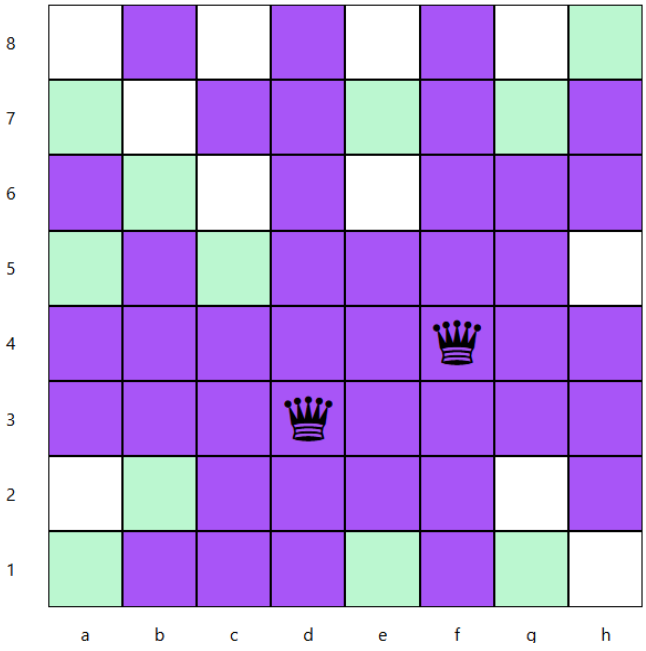
In the browser game, the computer does not allow illegal moves (ie., placing a piece in a row, column, or diagonal that contains an already placed piece) however, in a tournament a player making an illegal move is declared the loser if the other player demonstrates the position is illegal.

Let’s say the first player moves to d3.



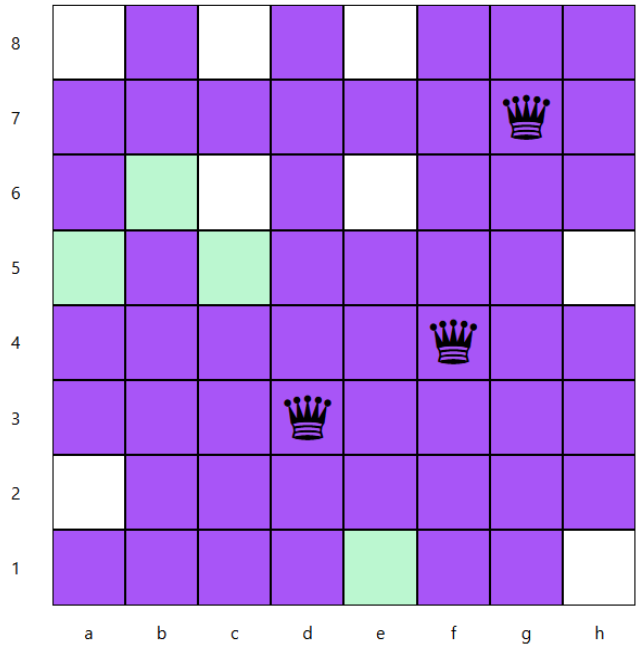
The purple squares are under attack and cannot be moved onto.

So then the second player moves to f4, an open square not being attacked by the first queen.

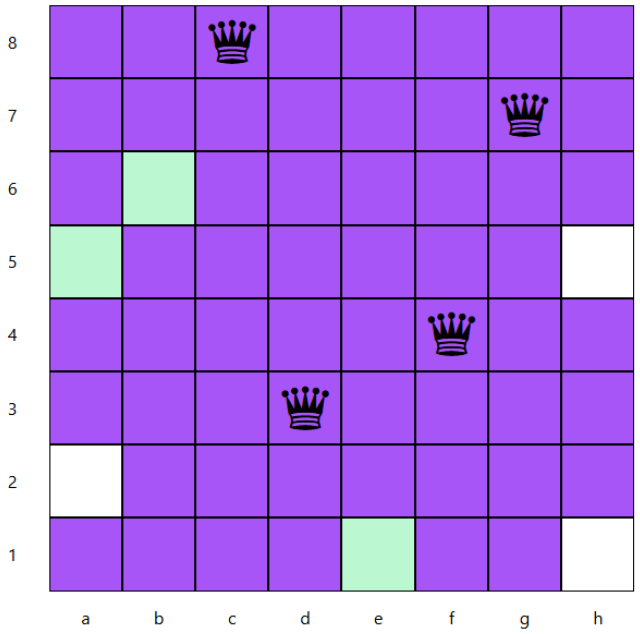


Note the purple squares are only for studying deduce. In actual play you have to somehow visualize the attacking squares which is exponentially harder. It is important to note, the game of deduce does not actually show the purple squares being attacked, this is only used for illustration and study. Although, it is possible. Also notice, there are not different colored queens, white for the first player and black for the second player. It doesn’t seem to help using different colors and really doesn’t matter much.

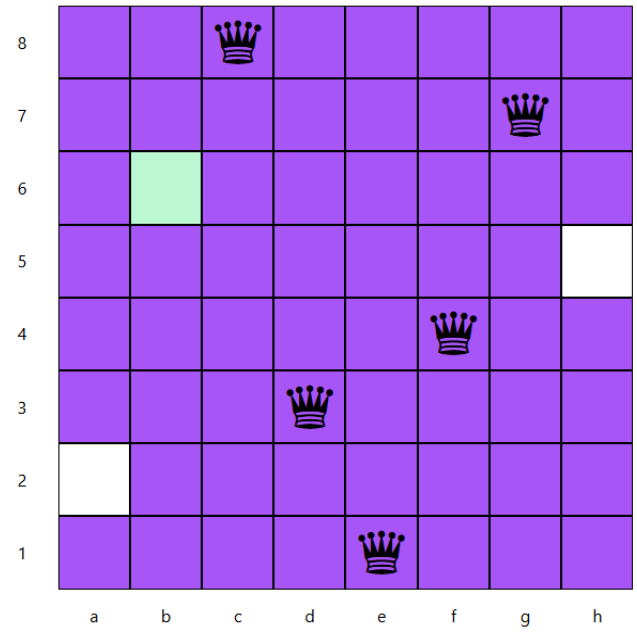
Continuing on with the game, say the first player moves to an open legal square at g7.



And then, the second player responds with a move to c8.

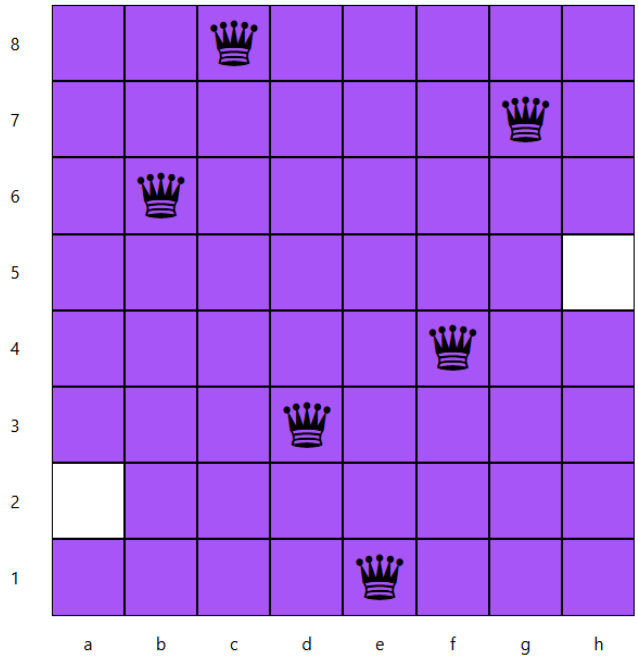


Next, a response by the first player at square e1.

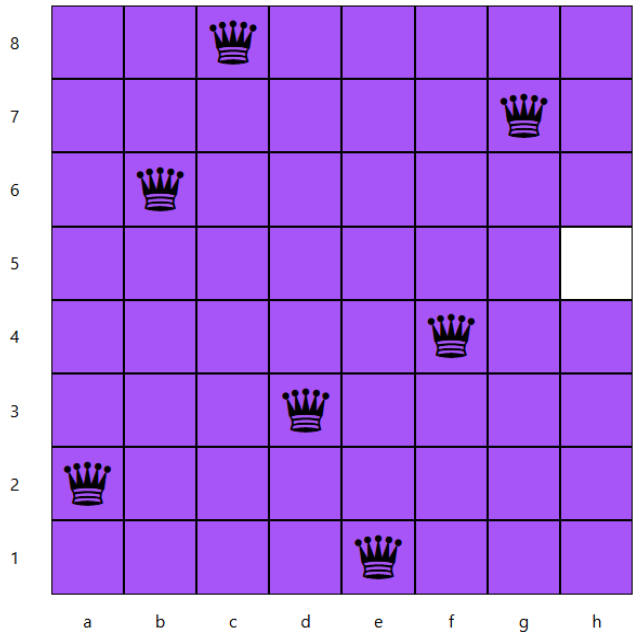


Now, there are 3 open squares left, not being attacked by any queen. Any of the three moves left are a win for the even player, for instance.

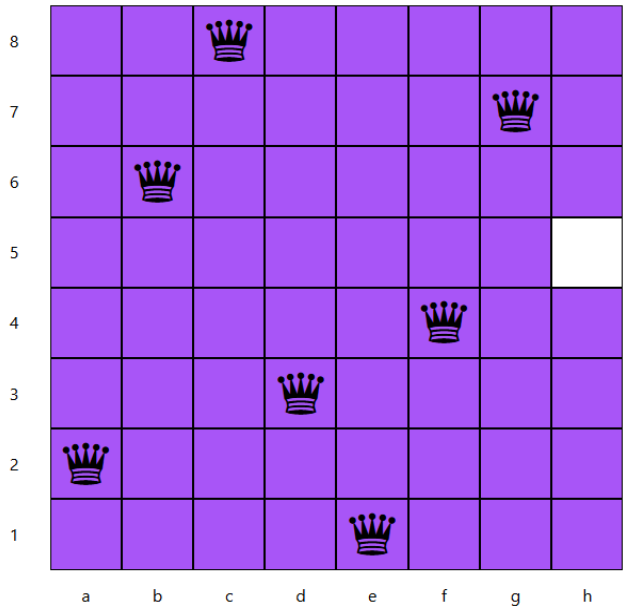
The even player proceeds by taking square c8.



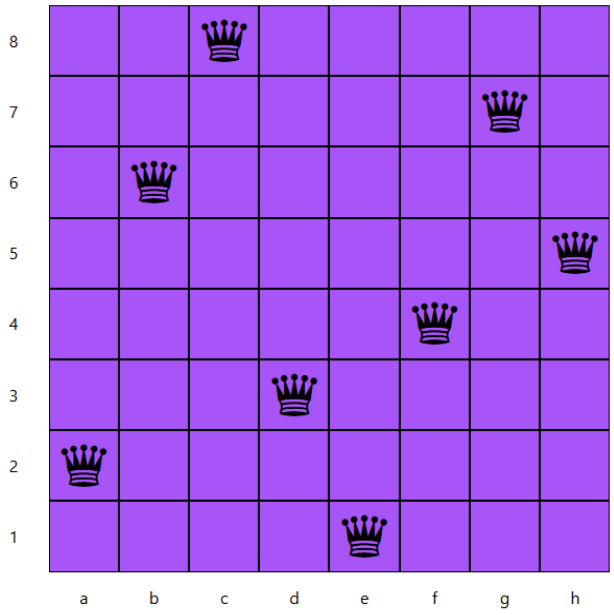
And the odd player moves to a2.



Leaving only one playable square left.



A final move to h5 ends the game with a win for the even player.



And the game is over, even player or second player won because they took the last open square. This example just happened to be an 8s solution. Meaning eight moves completes the game. You can have no more than eight queens on the board at a time in deduce. Many times it is less queens attacking every available square. However, there are no 4s in any legal position which end the game on the spot. There are many 5s, 6s, 7s, and 8s solutions.

Odd or even players correspond with the move numbers:

```
1, 3, 5, 7 odd player
2, 4, 6, 8 even player
```

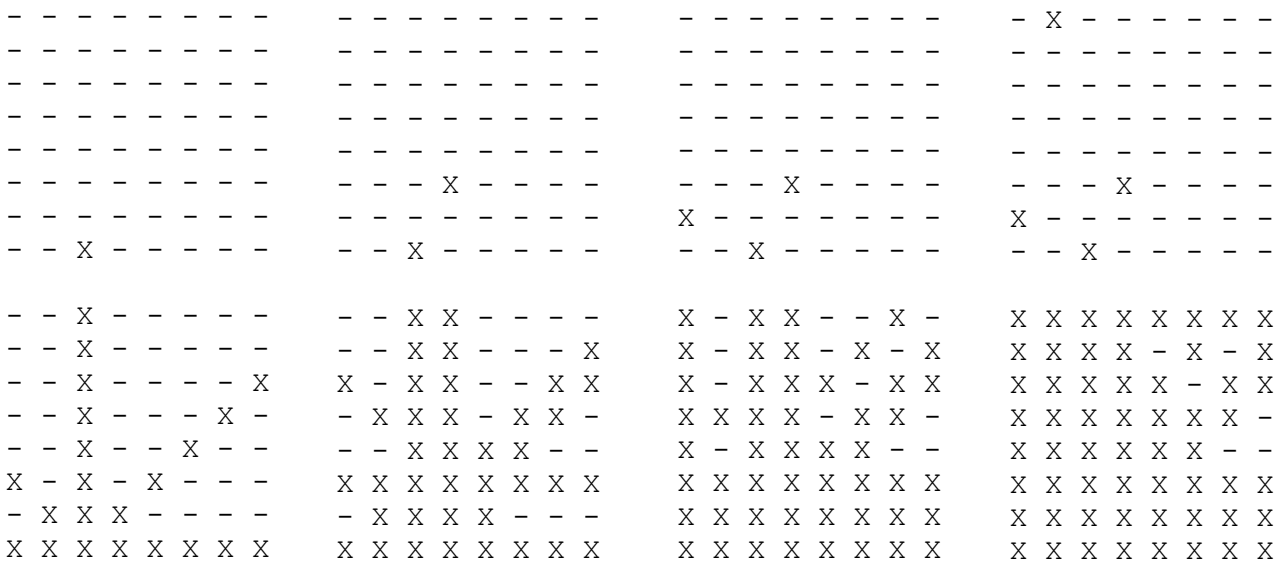
The colored boards are a bit difficult to collect; therefore, the writer is using text boards for the rest of the book, which are easier to produce, and they fit many more along the page. The reader can go to the website and study in color along with the book if it helps.

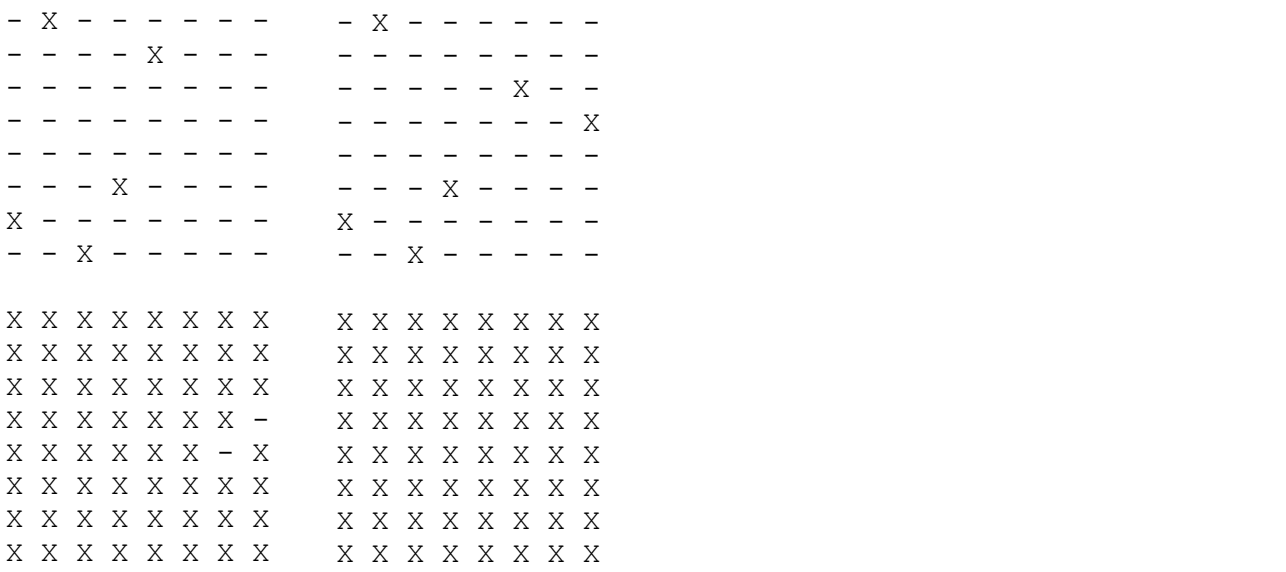
PRELIMINARY GAMES

To get a grip on playing deduce before trying to improve, let's warm up with two quick games against the weakest level, the Fish level. The Fish is basically a giveaway player that finds non-winning moves on purpose.

Computer moves first to c1. Then the human moves randomly to d3. Computer moves to a2. Now you can start thinking on how to beat the Fish. You want to ensure yourself the last move. Moving to b8 takes out a lot of open squares, eight to be precise, and leaves six open. Of these six open squares, there is no way for the computer opponent to attack all of them with one move. So wherever it moves, you can respond by taking the remaining squares and win the game.

```
  1. c1 d3    Scores            Games    Sets
  2. a2 b8    Human:             1       0
  3. f6 h5    Computer:          0       0
              Level: Fish
  4.          Statistics: Wins: 1, Losses: 0 (100%)
  1. computer
  human won
```





Now it's the human's turn to move first, as the rules state to alternate who moves first between games. Move d8 wins, all other moves lose.

```
  1. h1 c5    Scores            Games    Sets
  2. g3 a2    Human:             2       0
  3. d8       Computer:          0       0
  4.          Level: Fish
              Statistics: Wins: 2, Losses: 0 (100%)
  1. human
  human won
```