

CSE 114
Fall 2016
Fundamentals of Computer Programming
Assignment 8
Due: 6.12.2016 at 13:00

In this assignment, you will implement a C program where you generate the following decisions based on the positions of the queen and the rook in chess:

- Determine if the queen can capture the rook or not with a single movement.
- If the queen can not capture the rook with a single movement, display alternative positions to which the queen can move so that the rook can be captured in the next round.

The user will enter the coordinates of the queen and the rook. In order to determine if the queen can capture the rook, you should make a search on the positions that the queen can move. Certainly, these are the positions which are allowed for the queen in the chess game. You will maintain a 8x8 chess board with a 2D array. While traversing the chess board, you should **not** use array notation. The board will be traversed using pointers. At the end of the procedure, you should display the last position of the queen if it can capture the rook. If the rook cannot be captured than your program should display all the positions where the queen can move to capture the rook in the next run. An example display can be found below where Q denotes the original position of the queen and Q' denotes the possible moves that can be made to capture the queen in the next round. In parantheses, the coordinates of the queen and the rook are given.

	0	1	2	3	4	5	6	7
0								
1				Q (1,3)	Q' (1,4)			Q' (1,7)
2								
3								
4				Q' (4,3)				R (4,7)
5								
6								
7								