

Eight Queens with “Fancy Print” Chessboard

As discussed in class ...

Modify the Eight Queens program (1 dimensional array – no goto version) so that it prints out a chessboard with some “fancy” representation of a queen in the appropriate positions.

How to do it:

In class we went over the code to print out a chessboard. You need to:

1. Augment that code by adding two additional “box”es, wq which represents a picture of a queen placed in a “white” square, and bq, representing a picture of a queens placed in a “black” square.
2. After the code that fills the array board[8][8] with the addresses of bb and wb, insert code to **change eight entries in that array** to reflect the positions of **eight queens** on the board. You will get these positions from a one dimensional array q[8] representing a solution to the eight queens problem. The change that you make in these eight places is to replace the pointer in board for one representing either a wq, or bq, as appropriate for that position. You know the eight **positions** because, given q[i], i represents the column and q[i] represents the row. You can tell whether its black or white by looking at the row and column indexes of its position on the board.
3. **The code described above (in 2.) goes into the print function.** You pass the arrays q and board to print. In the function you
 - modify board using q
 - print the picture of the board
 - “Clean up” array board, by restoring its original values, to get ready for the next call to print.