## **PROBLEM 8**

## Verifying the 8-Queens

The 8-Queens problem in chess is to place 8 queens on a chess board such that none of the queens is threatening any of the others. A chess board is an 8 x 8 matrix of squares and queens may move any direction along a row, column or diagonal. The problem is to input the 8 columns of the queens on the rows of a chess board, with 1 being the first column and 8 being the last, e.g. 1 2 3 4 5 6 7 8 means the queens are along the diagonal, which would not be a valid solution.

## Example 1:

Enter board configuration: 3 5 2 8 1 7 4 6 This is a valid configuration.

## Example 2:

Enter board configuration: 1 8 2 5 3 7 4 6

This is NOT a valid configuration.