ECEN 5018 Spring 2014	Sudoku problem	**Vince Coghlan**

My sudoku code found two solution to the puzzle

$$\begin{pmatrix} 3 & 1 & 2 & 4 \\ 4 & 2 & 1 & 3 \\ 2 & 3 & 4 & 1 \\ 1 & 4 & 3 & 2 \end{pmatrix}$$

$$\begin{pmatrix} 4 & 1 & 2 & 3 \\ 3 & 2 & 1 & 4 \\ 2 & 3 & 4 & 1 \\ 1 & 4 & 3 & 2 \end{pmatrix}$$

The number of conflicts is twice the potential function, so ill just graph the potential function