n-Queens Heuristic Analysis
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I solved the nQueens problem as a CSP by implementing a DFS algorithm with forward propagation. The variables of the CSP are the n columns of a chessboard, and the values of each variable are the n rows.

I couldn't figure out why my DFS was running so fast, so my heuristics have minimal improvement. Code was implemented in Python 3.5 and tests were performed on a MacBook Pro.

Plain DFS

n	Nodes	Time
4	10	.09
8	36	.08
15	106	.06
27	354	.087
50	1226	.247
77	2929	.866

Heuristic 1
I shuffled the choices (columns) after picking the first unassigned row.

N	Nodes	Time
4	10	.066
8	29	.068
15	108	.03
27	352	.076
50	1226	.193
77	2927	.871

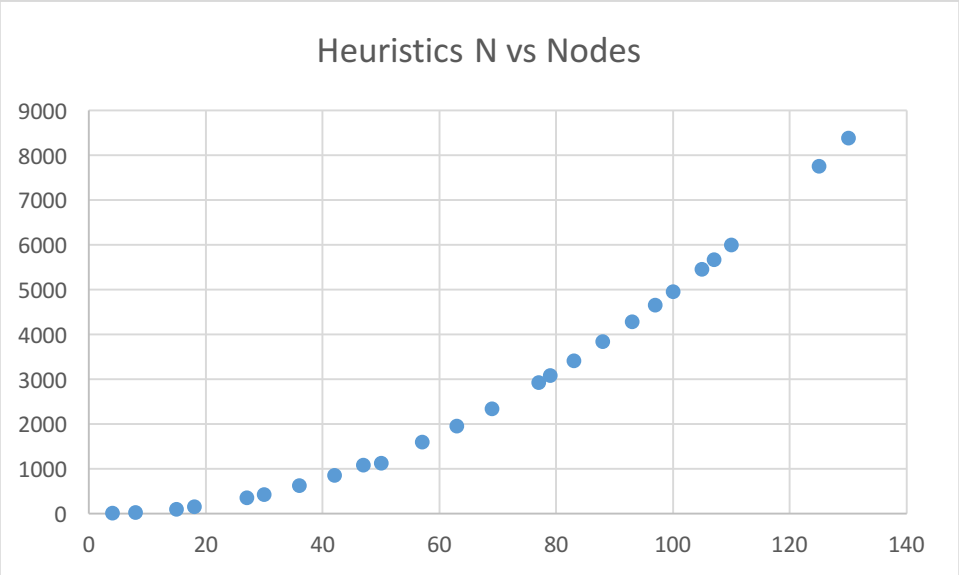
Heuristic 2
I chose the row with the most constraints instead of the first unassigned row, and returned the choices (cols) for that row.

N	Nodes	Time
4	10	.066
8	36	.067
15	106.03	.08
27	354	.086
50	1226	.194
77	2929	.874

Heuristic 3

I shuffled the choices (columns) after choosing the row with the most constraints.

N	Nodes	Time
4	10	.06
8	29	.05
15	106	.07
27	352	.068
50	1226	.214
77	2927	.848



All the heuristics had basically the same amount of nodes created, no matter what size N was, so I decided to only use one graph.