

CSC384
Assignment 2

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Q1.

Yes, Model 2 is more effective in pruning the variable domains.

Q2.

Model 1:

$972 = 9 * (9 * 8 / 2) * 3$ --- if we treat V11, V12 in row, sub square as two constraints

or

$810 = 9 * (9 * 8 / 2) * 2 + 9 * (9 * 4 / 2)$ --- if we treat V11, V12 in row, sub square as one constraint

Model 2:

$27 = 9 * 3$

Q3.

Model 1:

$72 = 9 * 8$

Model 2:

$362880 = 9!$

Q4.

Model 1:

$559872 = 972 * 72 * 4 * 2$

or

$466560 = 810 * 72 * 4 * 2$

Model 2:

$352719360 = 27 * 362880 * 4 * 9$