Foundations of Constraint Programming
Tutorial 3 (on November 20th)

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Exercise 3.1:
Apply the Domain Reduction Rules from Slide III/5 to the following CSPs until you reach a successful, failed or stabilising CSP. At each step give the rule you have used.

a) $\langle x = y, y = z, x \neq w, w \neq z; x \in \{a, b, c\}, y \in \{a, c, d\}, z \in \{c, d, e\}, w = c \rangle$

b) $\langle x \neq w, w < y, w < z, y < z; x \in [4..8], y \in [2..6], z \in [3..6], w \in [4..9] \rangle$

Exercise 3.2:
Take the following set of linear equations:

$$a + b + c = 0$$
$$4a + 2b + c = 1$$
$$9a + 3b + c = 3$$

a) Apply *Gauss-Jordan Elimination* to compute a *most general unifier (mgu)* for this set of equations.

b) Apply *Gaussian Elimination* to compute an mgu for this set of equations.