Deduction Systems

Tutorial 5

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Exercise 5.1. Given the program P_i, determine the stable models of P_i by applying the *Gelfond-Lifschitz-Reduct*.

$P_1 = \{a \leftarrow b,\, not\ c,\, d;$
$\quad c \leftarrow not\ b,\, a;$
$\quad b \leftarrow not\ c,\, not\ d;$
$\quad a \leftarrow\}$

$P_2 = \{a \leftarrow b,\, not\ c;$
$\quad b \leftarrow c,\, not\ a;$
$\quad c \leftarrow a,\, not\ b;$
$\quad b \leftarrow\}$

$P_3 = \{a \leftarrow not\ b,\, c;$
$\quad c \leftarrow not\ a,\, b\}$