

Deduction Systems

Tutorial 4

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Exercise 3.1. Apply the CDNL Algorithm to the program P to trace the stable model $\{b, c, d, e\}$. Highlight the steps of the nogood propagation, unfounded set checking and (if needed) conflict analysis.

$$P = \left\{ \begin{array}{llll} a \leftarrow \text{not } b; & c \leftarrow a; & d \leftarrow b, c; & e \leftarrow b, \text{not } a; \\ b \leftarrow \text{not } a; & c \leftarrow b, d; & d \leftarrow e; & e \leftarrow c, d \end{array} \right\}$$