

# Tutorial 8: Proposition and Inference

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December 11, 2016

## Exercise 8.2: CSI Stellingen

- Assumables:  
Gärtner hat im Garten gearbeitet:  $g\_garden$   
Butler hat in der Garage gearbeitet:  $b\_garage$
- Observations:  
Gärtner hat keinen Dreck an seinen Händen:  $\neg g\_dirt$   
Butler hat Dreck an seinen Händen:  $b\_dirt$
- Rules:  
If the gardener worked in the garden all day, he will have dirt on his hands:  $g\_dirt \leftarrow g\_garden$   
If the butler worked in the garage all day, he will have dirt on his hands:  $b\_dirt \leftarrow b\_garage$
- Integrity Constraints:  
The gardener has either dirt on his hands or he has no dirt on his hands:  $false \leftarrow g\_dirt \wedge \neg g\_dirt$   
The butler has either dirt on his hands or he has no dirt on his hands:  $false \leftarrow b\_dirt \wedge \neg b\_dirt$