Assignment 5

Foundations of Logic Programming

December 12, 2012

- 1. Draw the SLD-trees for $SUMMER \cup \{happy\}$ (Slide1) via the leftmost selection rule and via the rightmost selection rule.
- 2. Prove that every SLD-tree is via a variant independent selection rule.
- 3. Prove the Branch Theorem: Consider an SLD-tree \mathcal{T} for $P \cup \{Q\}$ via a variant independent selection rule \mathcal{R} . Then every SLD-derivation of $P \cup \{Q\}$ via \mathcal{R} is similar to a branch of \mathcal{T} .