CPSC 322, Practice Exercise Logic: Syntax

1 Directed Questions

In propositional definite clause logic (PDCL),

- What is an atom? Give the definition and an example.
- What is a body? Give the definition and an example.
- What is a definite clause? Give the definition and an example.
- What is a knowledge case? Give the definition and an example.
- What is an interpretation of a knowledge base KB? Give the definition and an example.
- What is a model of a knowledge base KB?

2 Syntax

Which of the following rules are syntactically invalid in propositional definitive clause logic, and why?

- 1. bikeCrashed \leftarrow cycledDrunk
- 2. $goByBus \lor goByCar \leftarrow bikeBroke$
- 3. goByBus $\leftarrow \neg haveGas \lor bikeBroke$

3 Learning Goals

You can:

• Model a relatively simple domain with propositional definite clause logic (PDCL)