

Introduction to Logic Programming – WS 2023

Solutions for Exercise Sheet 2

1 Exercises

Exercise 3 (First-Order Logic)

Translate the following statements to First-Order Logic:

1. The following applies to all dogs: If they live in packs, then they can talk.
2. All huskies are dogs and live in packs.
3. Snowy is a husky.

1. $\forall x : \text{dog}(x) \wedge \text{live_in_pack}(x) \Rightarrow \text{can_talk}(x)$
2. $\forall x : \text{husky}(x) \Rightarrow \text{dog}(x) \wedge \text{live_in_pack}(x)$
3. $\text{husky}(\text{snowy})$