



Homework

1. Find the λ_2 terms that inhabit the following types in the given context:

(a) $\{\mathbb{N} : \star\} \vdash \dots : \Pi ab : \star. (\mathbb{N} \rightarrow a) \rightarrow (a \rightarrow \mathbb{N} \rightarrow b) \rightarrow \mathbb{N} \rightarrow b$

(b) $\{\} \vdash \dots : \Pi abc : \star. (a \rightarrow (b \rightarrow a) \rightarrow c) \rightarrow a \rightarrow c$

2. Propose a way in which type derivations can be written in flag style

- What kind of sharing is possible?

3. What datastructures would you use to implement a proof-assistant based on set theory?

- Implement the datatypes, and show the types of basic data and inference rules