Inference at $*$ 2 1 4
 of proof for Lemma before_last:

1. $T$ : Type
2. $T$ List
3. $u$ : $T$
4. $v$ : $T$ List
5. $\forall x{:}T.\ (x \in v) \Rightarrow (\neg(x = \text{last}(v))) \Rightarrow x$ before $\text{last}(v) \in v$
6. $x$ : $T$
7. $(x \in v)$
8. $\neg(x = \text{last}([u\ /\ v]))$

$\vdash [x; \text{last}(v)] \subseteq v$

by ((((Fold 'l_before' 0)
CollapseTHEN (BackThruSomeHyp))·)
CollapseTHEN (
(Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 4:n)) (first_tok :t) inil_term)))·

1:

$\vdash \neg(x = \text{last}(v))$

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