

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

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

$\vdash (\text{last}(v) \in v)$
by ((BackThruLemma ‘last_member’)
CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat
1:n),(first_nat 4:n)) (first_tok :t) inil_term)))).

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