

Inference at * 1 3
of proof for Lemma last-not-before:

1. $T : \text{Type}$
2. $L : T \text{ List}$
3. $\neg(\uparrow\text{null}(L))$
4. $\text{no_repeats}(T;L)$
5. $x : T$
6. $\text{last}(L) \text{ before } x \in L$
7. $\forall x, y:T. x \text{ before } y \in L \Rightarrow (\neg(x = y))$
8. $\neg(\text{last}(L) = x)$
9. $x \text{ before last}(L) \in L$

$\vdash \text{False}$
by InteriorProof ((FLemma 'l.before.transitivity' [6;9])
CollapseTHEN (MaAuto.)).

1:

10. $\text{last}(L) \text{ before last}(L) \in L$

$\vdash \text{False}$