

Inference at * 2 1 3 1
of proof for Lemma before_last:

```

1. T : Type
2. T List
3. u : T
4. v : T List
5.  $\forall x:T. (x \in v) \Rightarrow (\neg(x = \text{last}(v))) \Rightarrow x \text{ before } \text{last}(v) \in v$ 
6. x : T
7. (x ∈ [])
8.  $\neg(x = \text{last}([u / v]))$ 
9. v = []
⊢ False
  by ((RWO "nil_member" (-3))
CollapseTHEN ((Auto_aux (first_nat 1:n) ((first_nat 1:n
), (first_nat 4:n)) (first_tok :t) inil_term))))
.

```