

Inference at \* 2 1  
of proof for Lemma fseg\_select:

1.  $T : \text{Type}$
  2.  $l_1 : T \text{ List}$
  3.  $l_2 : T \text{ List}$
  4.  $\|l_1\| \leq \|l_2\|$
  5.  $\forall i:\mathbb{N}. (i < \|l_1\|) \Rightarrow (l_1[i] = l_2[(\|l_2\| - \|l_1\|)+i])$
- $\vdash \exists L:T \text{ List}. (l_2 = (L @ l_1))$   
by ((InstConcl [firstn( $\|l_2\| - \|l_1\|$ ); $l_2$ ])  
CollapseTHENA (Auto')).

1:

$$\vdash l_2 = (\text{firstn}(\|l_2\| - \|l_1\|; l_2) @ l_1)$$

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