

Inference at * 1
of proof for Lemma comp_nat_ind_a:

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1.  $P : \mathbb{N} \rightarrow \mathbb{P}\{k\}$ 
2.  $\forall i:\mathbb{N}. (\forall j:\mathbb{N}. (j < i) \Rightarrow P(j)) \Rightarrow P(i)$ 
3.  $i : \mathbb{N}$ 
 $\vdash P(i)$ 
  by ((% Generalize %
Assert  $\forall j, s:\mathbb{N}. (s < j) \Rightarrow P(s)$ 
CollapseTHEN (IfLabL

  ['assertion',Id
  ;'main',((InstHyp [i+1;i] (-1))
CollapseTHEN (
  (Auto_aux (first_nat 1:n) ((first_nat 2:n),(first_nat 3:n)) (first_tok :t) inil_term))))).
])).

1: .....assertion..... NILNIL

 $\vdash \forall j, s:\mathbb{N}. (s < j) \Rightarrow P(s)$ 
.
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