

Inference at * 1
of proof for Lemma nat_ind:

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1.  $P : \mathbb{N} \rightarrow \mathbb{P}\{k\}$ 
2.  $P(0)$ 
3.  $\forall i:\mathbb{N}^+. P(i - 1) \Rightarrow P(i)$ 
4.  $j : \mathbb{N}$ 
 $\vdash P(j)$ 
   by InteriorProof NatInd 4

1: .....basecase..... NILNIL

      3.  $\forall i:\mathbb{N}^+. P(i - 1) \Rightarrow P(i)$ 
       $\vdash P(0)$ 
2: .....upcase..... NILNIL

      4.  $j : \mathbb{Z}$ 
      5.  $0 < j$ 
      6.  $P(j - 1)$ 
       $\vdash P(j)$ 
.
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