

Inference at * 1 2 1
of proof for Lemma fincr_formation:

....assertion.... NILNIL

1. $i : \mathbb{N}$
2. $f : \{f \mid i:\{i_1:\mathbb{N} \mid i_1 (\lambda i,j. i < j) i\} \rightarrow \text{if } (i =_0 0) \text{ then } \mathbb{Z} \text{ else } \{f(i-1)\dots\} \text{ fi}\}$
 $\vdash \forall j:\{k:\mathbb{N} \mid k < i\} . f(j) \in \mathbb{Z}$
by (((((((AbReduce (-1))
CollapseTHEN (D 0)))
CollapseTHENM (D (-1))))
CollapseTHENM (CompNatInd (-2))))
THENW ((Auto_aux (first_nat 1:n) ((first_nat 1:n
),(first_nat 3:n)) (first_tok :t) inil_term))))

1:

2. $f : \{f \mid i:\{i_1:\mathbb{N} \mid i_1 < i\} \rightarrow \text{if } (i =_0 0) \text{ then } \mathbb{Z} \text{ else } \{f(i-1)\dots\} \text{ fi}\}$
3. $j : \mathbb{N}$
4. $\forall j_1:\mathbb{N}. (j_1 < j) \Rightarrow (j_1 < i) \Rightarrow (f(j_1) \in \mathbb{Z})$
 $\vdash (j < i) \Rightarrow (f(j) \in \mathbb{Z})$