Inference at $*$ 1 1
of proof for Lemma add_functionality_wrt_lt:

1. $i_1 : \mathbb{Z}$
2. $i_2 : \mathbb{Z}$
3. $j_1 : \mathbb{Z}$
4. $j_2 : \mathbb{Z}$
5. $i_1 < j_1$
6. $i_2 \leq j_2$

$\vdash (i_1+i_2+1) \leq (j_1+j_2)$
by ((Assert $(i_1+1+i_2) \leq (j_1+j_2)$)
CollapseTHENM ((Auto_aux (first_nat 1:n) ((first_nat 2:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

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

$\vdash (i_1+1+i_2) \leq (j_1+j_2)$
.