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

$\vdash \{f \mid i{:}\mathbb{N} \rightarrow \text{if } (i =_0 0) \text{ then } \mathbb{Z} \text{ else } \{f(i \text{ - } 1)\ldots\} \text{ fi } \}$
by ((With $\lambda i,j.\ i < j$ (D 0))
THENW ((Auto_aux (first_nat 1:n) ((first_nat 1:n
),(first_nat 3:n)) (first_tok :t) inil_term)))·

1: .....aux..... NILNIL

$\vdash \downarrow\text{WellFnd}\{1\}(\mathbb{N};u,v.(\lambda i,j.\ i < j)(u,v))$

2:

1. $i : \mathbb{N}$
2. $f :$
$\{f \mid i{:}\{i_1{:}\mathbb{N} \mid i_1\ (\lambda i,j.\ i < j)\ i\} \rightarrow \text{if } (i =_0 0) \text{ then } \mathbb{Z} \text{ else } \{f(i \text{ - } 1)\ldots\} \text{ fi } \}$

$\vdash \text{if } (i =_0 0) \text{ then } \mathbb{Z} \text{ else } \{f(i \text{ - } 1)\ldots\} \text{ fi}$

.