

Inference at \* 1  
of proof for Lemma squash\_functionality\_wrt\_implies:

```
1. P :  $\mathbb{P}$ 
2. Q :  $\mathbb{P}$ 
3. P  $\Rightarrow$  Q
4.  $\downarrow P$ 
 $\vdash \downarrow Q$ 
  by ((((((D 4)
    CollapseTHEN (D 0)).)
    CollapseTHEN (D 3)).)
    CollapseTHEN (
      (Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 4:n)) (first_tok :t) inil_term))).
```