

Inference at *
of proof for Lemma ifthenelse_wf:

```
⊢∀b:ℕ, A:Type, p,q:A. if b then p else q fi ∈ A
  by ((UnivCD)
    CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)
      )) (first_tok :t) inil_term)))
```

1:

1. $b : \mathbb{N}$
 2. $A : \text{Type}$
 3. $p : A$
 4. $q : A$
- ⊢ if b then p else q fi $\in A$