

Inference at * 1 1
of proof for Lemma complete_nat_ind_with_y:

....subterm.... T:t1:n

1. $P : \mathbb{N} \rightarrow \mathbb{P}\{k\}$
 2. $g : \forall i:\mathbb{N}. (\forall j:\mathbb{N}i. P(j)) \Rightarrow P(i)$
- $\vdash Y(\lambda f,x. g(x,f)) \in (\forall i:\mathbb{N}. P(i))$
by Assert $Y(\lambda f,x. g(x,f)) \in !\text{Void}() \rightarrow !\text{Void}()$

1:assertion.... NILNIL

$\vdash Y(\lambda f,x. g(x,f)) \in !\text{Void}() \rightarrow !\text{Void}()$

2:

3. $Y(\lambda f,x. g(x,f)) \in !\text{Void}() \rightarrow !\text{Void}()$
- $\vdash Y(\lambda f,x. g(x,f)) \in (\forall i:\mathbb{N}. P(i))$
- .