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

1. x : Atom
2. y : Atom
3. $\uparrow$if x=y then tt else ff
$\vdash x = y$
 by ((Decide $x = y$)
 CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n
 ),(first_nat 4:n)) (first_tok :t) inil_term)))·

 1:

 4. $x = y$
 $\vdash x = y$
 2:

 4. $\neg(x = y)$
 $\vdash x = y$
 .