

Inference at \* 1  
of proof for Lemma decidable\_le:

1.  $i : \mathbb{Z}$   
2.  $j : \mathbb{Z}$   
 $\vdash (i \leq j) \vee (\neg(i \leq j))$   
by (Auto\_aux (first\_nat 1:n) ((first\_nat 2:n),(first\_nat 3:n)) (first\_tok :t) inil\_term)