

Inference at * 2
of proof for Lemma p-conditional-domain:

1. $A : \text{Type}$
2. $B : \text{Type}$
3. $f : A \rightarrow (B + \text{Top})$
4. $g : A \rightarrow (B + \text{Top})$
5. $x : A$
6. $(\uparrow \text{isl}(f(x))) \vee (\uparrow \text{isl}(g(x)))$
 $\vdash \uparrow \text{isl}(\text{if } \text{isl}(f(x)) \text{ then } f(x) \text{ else } g(x) \text{ fi})$
by $((\text{D } (-1))$
 $\text{CollapseTHEN } (\text{SplitOnConclITE}))$
 $\text{CollapseTHEN } (\text{Auto.})$.