The specification
\[ \textbf{var} \ x : \text{nat} \ x := -1 \]
introduces a local variable and then assigns it a value that is out of bounds. Is this specification implementable? (Proof required.)

§ Let the nonlocal variables be \( \sigma \).
\[ \textbf{var} \ x : \text{nat} \ x := -1 \]
\[ \equiv \ \exists x, x' : \text{nat} \ x' = -1 \land \sigma' = \sigma \]
local axiom \( x' : \text{nat} \) conflicts with \( x' = -1 \)
\[ \equiv \ \bot \]
so it is unimplementable.