# Theoretical\_ Exercise

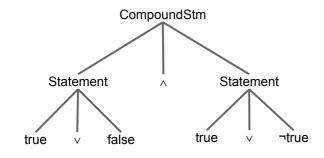
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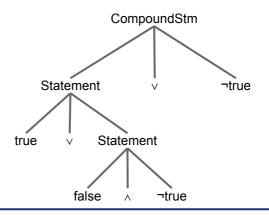
### **Theoretical Exercise - Week 6**

## **Mandatory Theoretical Exercise**

Show that the grammar is ambiguous by constructing two parse trees for the same expression.

#### true ∨ false ∧ true ∨ ¬true





Construct an unambiguous grammar for the same languages. The grammar should use BNF not EBNF.

E:= 
$$F \lor E$$
 F:=  $\neg F$ 
I  $F \land E$  I true
I F
I false
I (E)

Construct the parse tree of the following expression for using your new grammar:

#### false v ¬true ∧ (false v true) v false

