
Practice 1: BNF (Backus Naur Form): Parse Tree

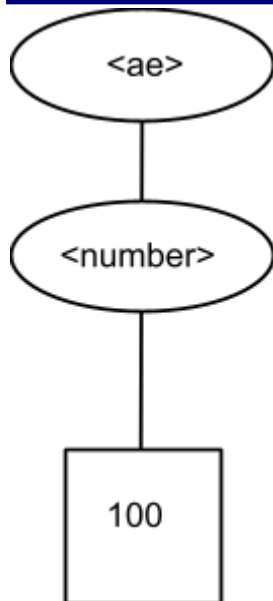
Learning Abstract

This goes over for steps to make a Parse Tree.

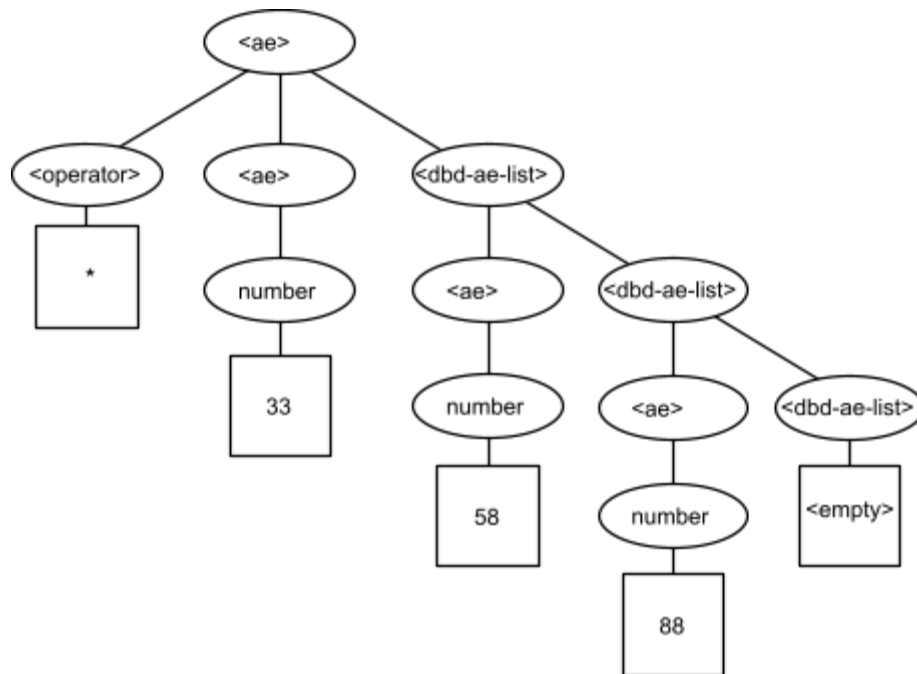
A BNF Sketch of Arithmetic Expressions $(\text{number})/*:\cdot\text{}$

1. $\langle \text{ae} \rangle ::= (\langle \text{operator} \rangle \langle \text{ae} \rangle \langle \text{dbd-ae-list} \rangle)$
2. $\langle \text{ae} \rangle ::= \langle \text{number} \rangle$
3. $\langle \text{ae} \rangle ::= \langle \text{numeric-variable} \rangle$
4. $\langle \text{operator} \rangle ::= + \mid - \mid * \mid /$
5. $\langle \text{dbd-ae-list} \rangle ::= \langle \text{empty} \rangle$
6. $\langle \text{dbd-ae-list} \rangle ::= \langle \text{ae} \rangle \langle \text{dbd-ae-list} \rangle$

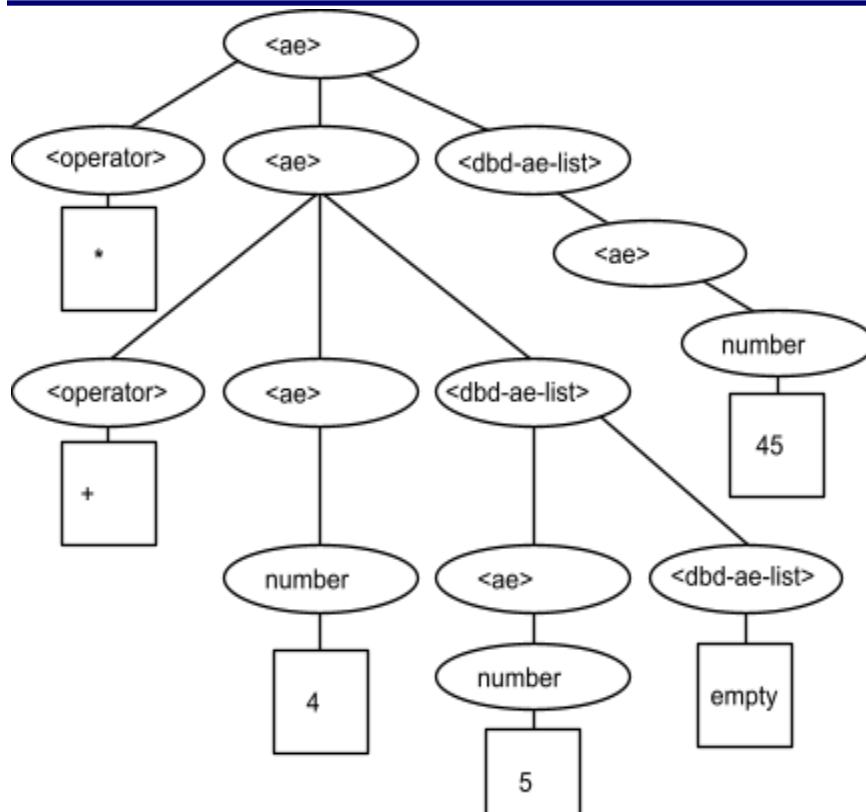
Exercise 1 with Parse Tree $\langle \text{'100'} \rangle$ One: 100



Exercise 2 with Parse Tree $\text{number} \cup \text{number}$. Two: $(* 33 55 88)$



Exercise 3 with Parse Tree •~• Three: (* (+ 4 5) 45)



***Note: I forgot to add another dbd-ae-list on the right side, for empty variable after
45**