

## Semantische Regeln

literal:

$x.v = \text{int}(x.\text{token})$

$x.h = 1$

plus:

$x.v = x.\text{lhs}.v + x.\text{rhs}.v$

$x.h = \max(x.\text{lhs}.h, x.\text{rhs}.h) + 1$

A : plus
v = B.v + C.v h = max(B.h, C.h)+1

↙ .lhs

↘ .rhs

B : literal
token = 4
v = int(B.token) h = 1

C : plus
v = D.v + E.v h = max(D.h, E.h)+1

↙ .lhs

↘ .rhs

D : literal
token = 3
v = int(D.token) h = 1

E : literal
token = 5
v = int(E.token) h = 1

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·lhs

↘  
·rhs

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token = 4
v = int(B.token) h = 1

C : plus
v = D.v + E.v h = max(D.h, E.h)+1

↙  
·lhs

↘  
·rhs

D : literal
token = 3
v = int(E.token) h = 1

E : literal
token = 5
v = 5 h = 1

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↙  
·lhs

↘  
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D : literal
token = 3
v = 3 h = 1

E : literal
token = 5
v = 5 h = 1

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A : plus
v = B.v + C.v
h = max(B.h, C.h)+1

↙ .lhs

↘ .rhs

B : literal
token = 4
v = int(B.token)
h = 1

C : plus
v = D.v + E.v
h = 2

↙ .lhs

↘ .rhs

D : literal
token = 3
v = 3
h = 1

E : literal
token = 5
v = 5
h = 1

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↙  
·lhs

↘  
·rhs

B : literal
token = 4
v = 4 h = 1

C : plus
v = D.v + E.v h = 2

↙  
·lhs

↘  
·rhs

D : literal
token = 3
v = 3 h = 1

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token = 5
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A : plus
v = B.v + C.v
h = 3

↙  
·lhs

↘  
·rhs

B : literal
token = 4
v = 4
h = 1

C : plus
v = D.v + E.v
h = 2

↙  
·lhs

↘  
·rhs

D : literal
token = 3
v = 3
h = 1

E : literal
token = 5
v = 5
h = 1

## Semantische Regeln

literal:

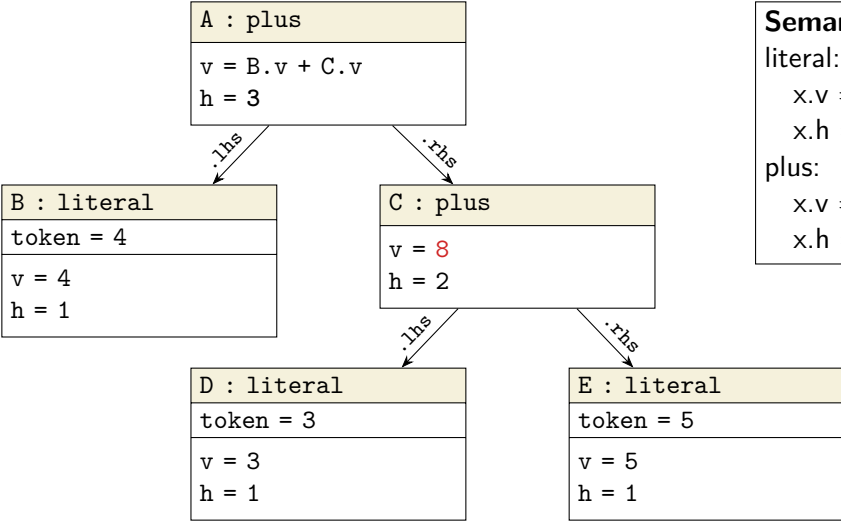
$x.v = \text{int}(x.\text{token})$

$x.h = 1$

plus:

$x.v = x.\text{lhs}.v + x.\text{rhs}.v$

$x.h = \max(x.\text{lhs}.h, x.\text{rhs}.h) + 1$



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$x.h = \max(x.\text{lhs}.h, x.\text{rhs}.h) + 1$



A : plus
v = 12
h = 3

↙  
·lhs

↘  
·rhs

B : literal
token = 4
v = 4
h = 1

C : plus
v = 8
h = 2

↙  
·lhs

↘  
·rhs

D : literal
token = 3
v = 3
h = 1

E : literal
token = 5
v = 5
h = 1

## Semantische Regeln

literal:

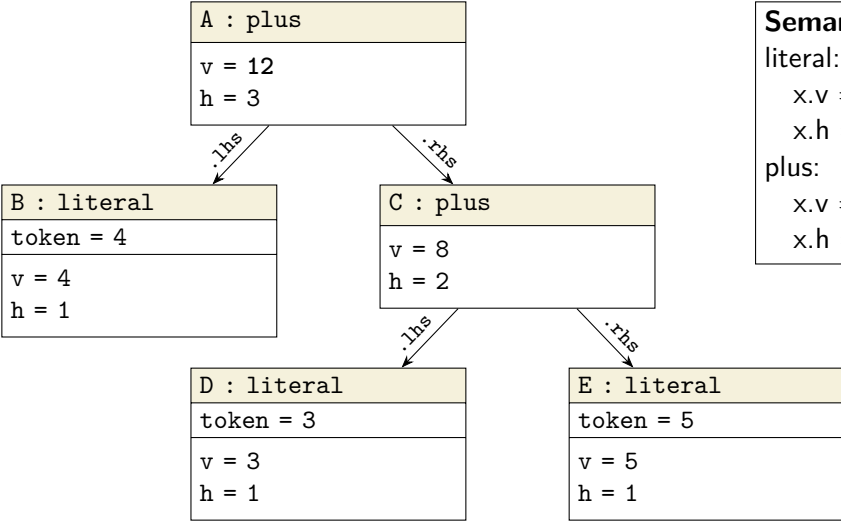
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