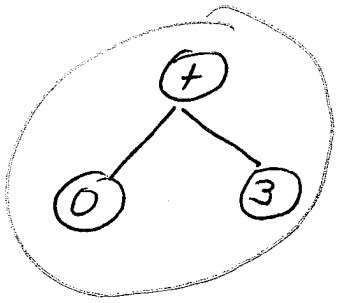
Expression

- root node
- methods to insert new nodes:
  four types: +, −, *, /

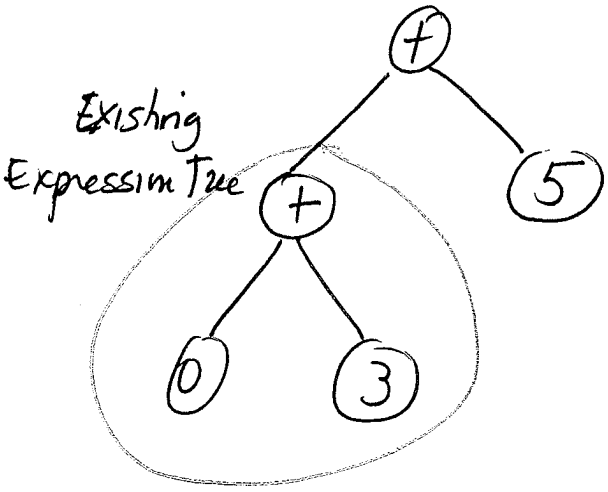
Example

for "+", method add

First node:
add 3



add 5

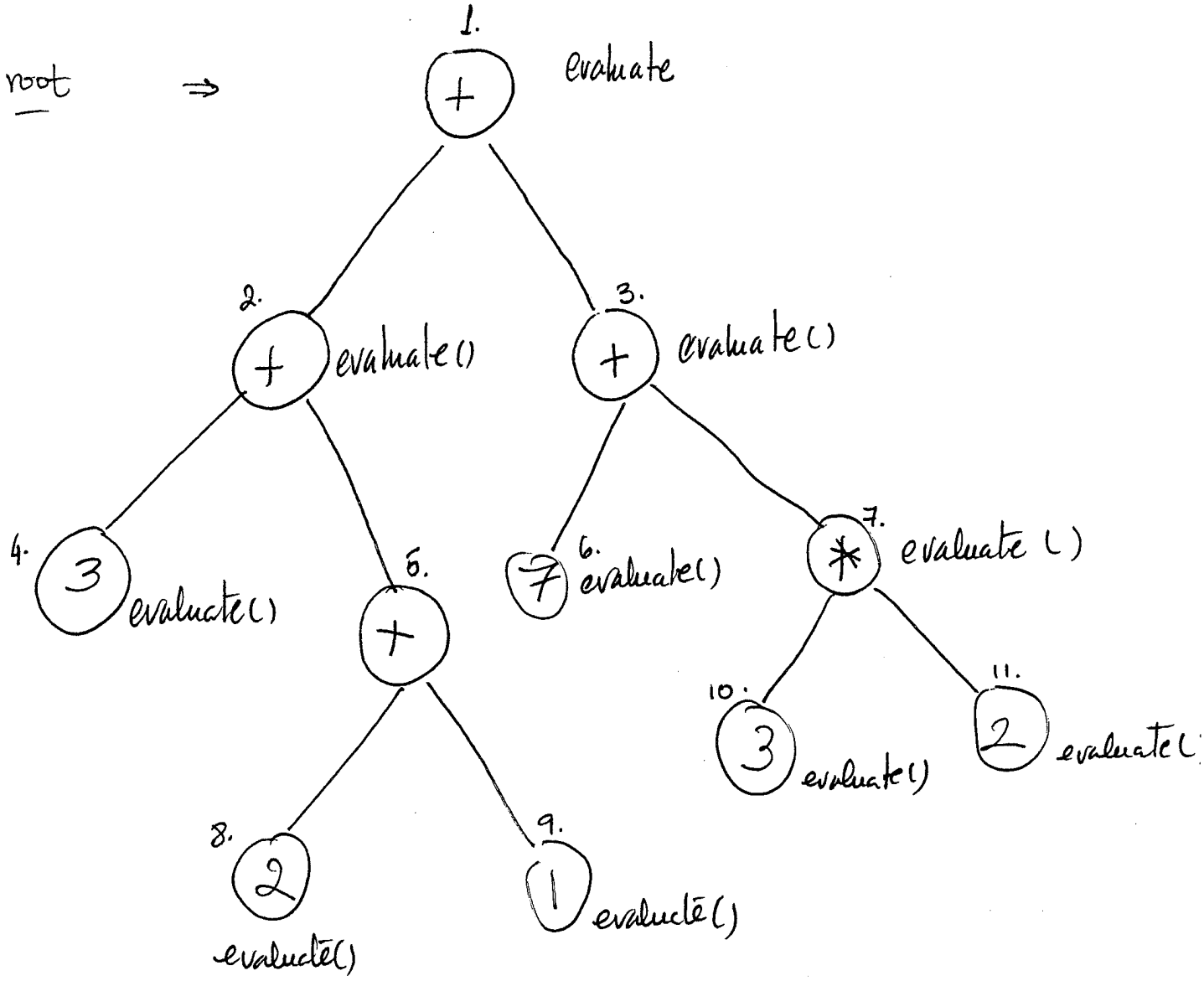


Other methods:

subtract	(value is to the right)
times	(value is to the right
divides	(value is to the left)
divided by	(value is to the right)

E1

Evaluate - Recursive Approach



node 1

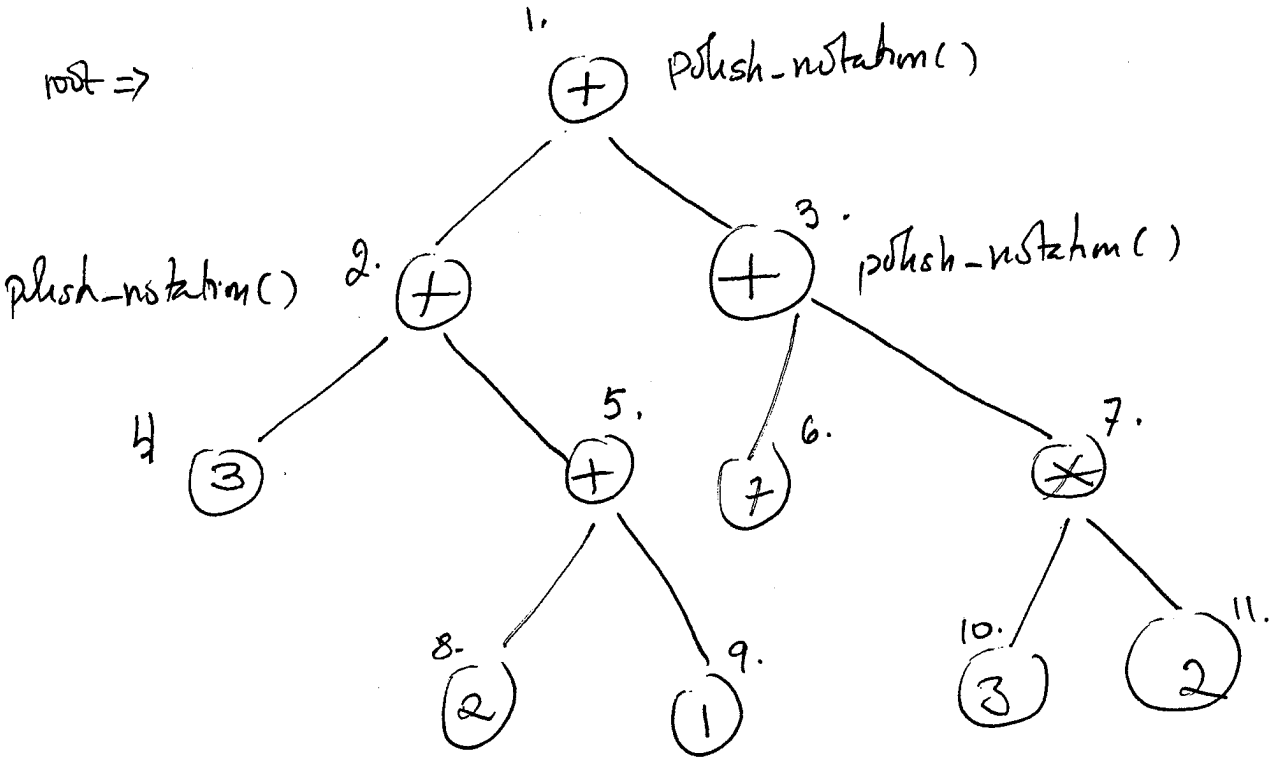
evaluate = node 2 → evaluate + node 3 → evaluate

node 2

evaluate = node 4 → evaluate + node 5 → evaluate

⋮

Polish Notation - Recursive Approach



Polish Notation

Op_1 Op_2 Operator ie. (2 + 1)

ie. 2 1 +

=

LeftOp RightOp. Operation

Polish notation for root-node 1.

"+"

Pn node 2 Pn node 3

Pn node 4 Pn node 5

Pn node 8 Pn node 9