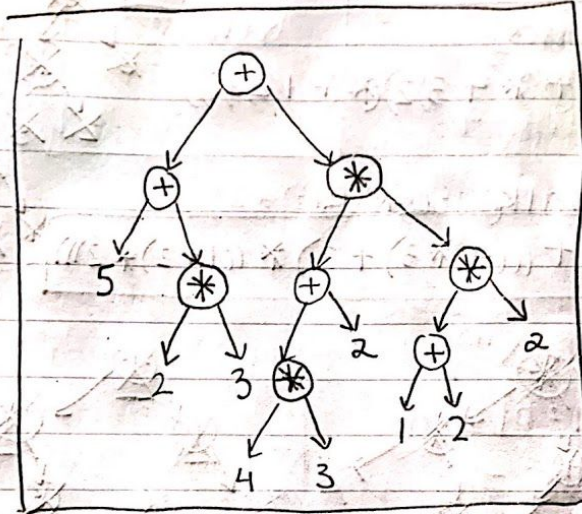


data structures Final EXAM

Q1

① Draw a BET

$$(5+2*3) + (4*3+2) * ((1+2)*2)$$



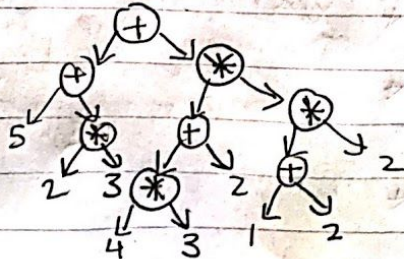
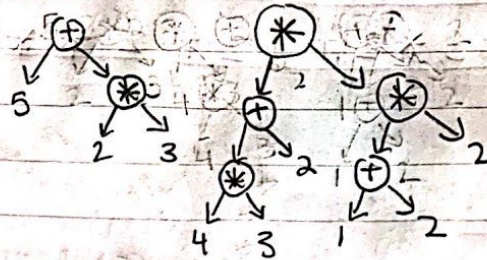
check w/ Queue Method

Eqn $(5+2*3) + (4*3+2) * ((1+2)*2)$

current Token

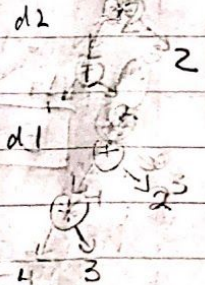
operator +

operand



✓ same

op

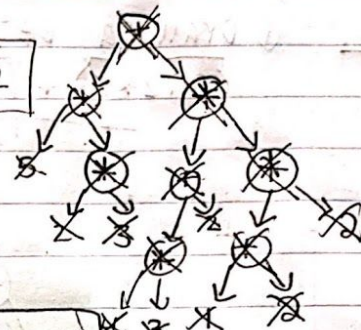


② Pre order walk: NLR

$+ + 5 * 2 3 * + * 4 3 2 * + 1 2 2$

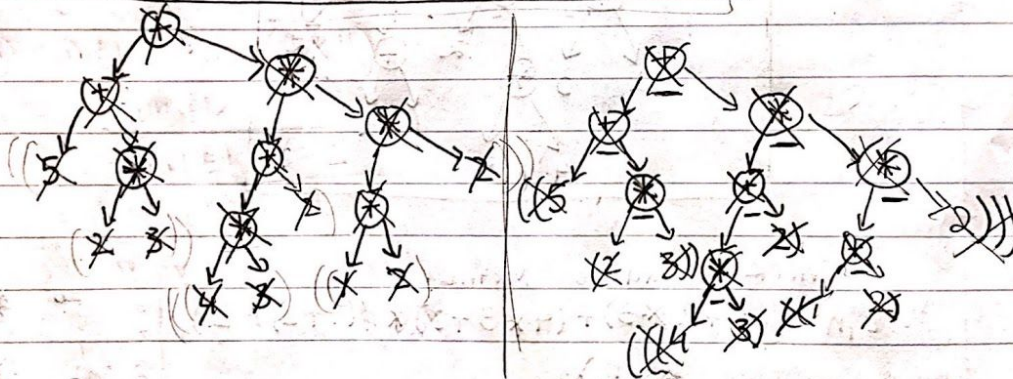
w/ parentheses

$(+(+ 5 (* 2 3))(* (+ (* 4 3) 2)(* (+ 1 2) 2)))$



③ In order walk: LNR

$((5 + (2 * 3)) + (((4 * 3) + 2) * ((1 + 2) * 2)))$



④ Post order walk: LRN

$5 2 3 * + 4 3 * 2 + 1 2 + 2 * * +$