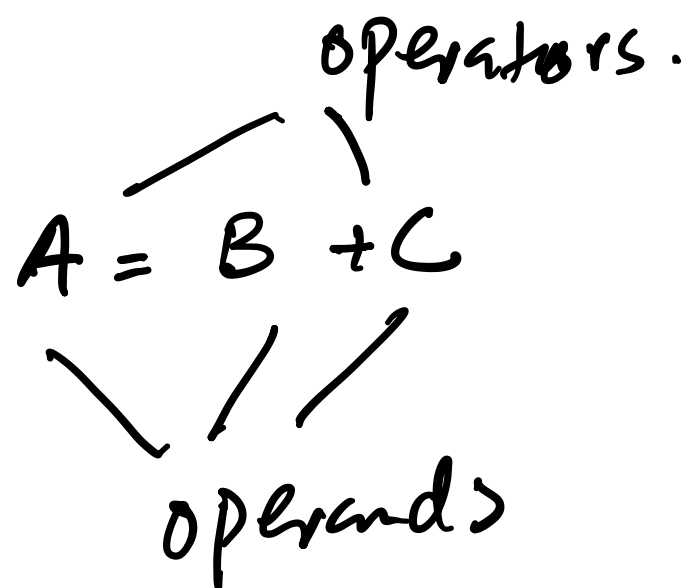


Three Address Code (TAC):



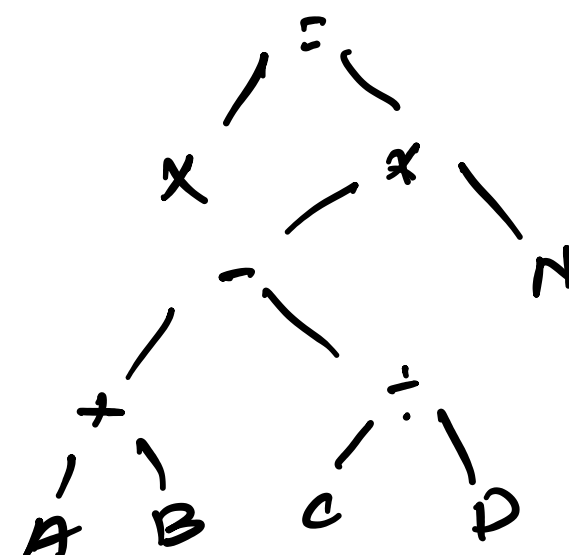
$$X = ((A + B) - (C \div D)) * N$$

$$E = A + B$$

$$F = C \div D$$

$$G = E - F$$

$$X = G * N$$



$$R1 = 2 * 3 \quad \checkmark$$

$$R2 = 3 \div R1 \quad \checkmark$$

$$R3 = R1 + 4 \quad \checkmark$$

$$* R5 = 3 \div R2 \quad \times$$

$$R6 = R5 - 1 \quad R6 = R2 - 2$$

$$R7 = 2 * R6 \quad \checkmark$$

Optimised code:

$$R1 = 2 * 3$$

$$R2 = 3 \div R1$$

$$R3 = R1 + 4$$

$$R6 = R2 - 1$$

$$R7 = 2 * R6$$

OPTIMISATION

- less Code size
- faster Code execution speed.

- To find a balance b/w the size of the code and the speed of execution.