

COMPILER DESIGN

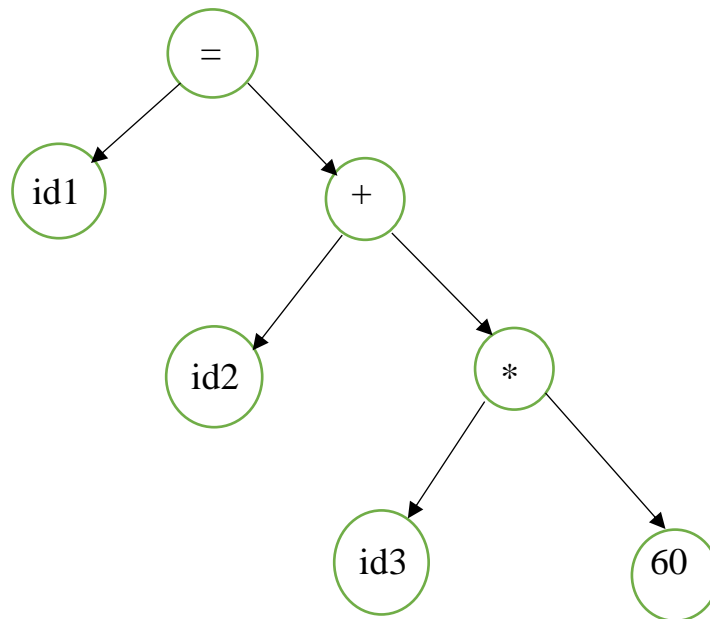
ASSIGNMENT-2

1. $\text{pos} = \text{initial} + \text{rate} * 60$. Assuming all are real.

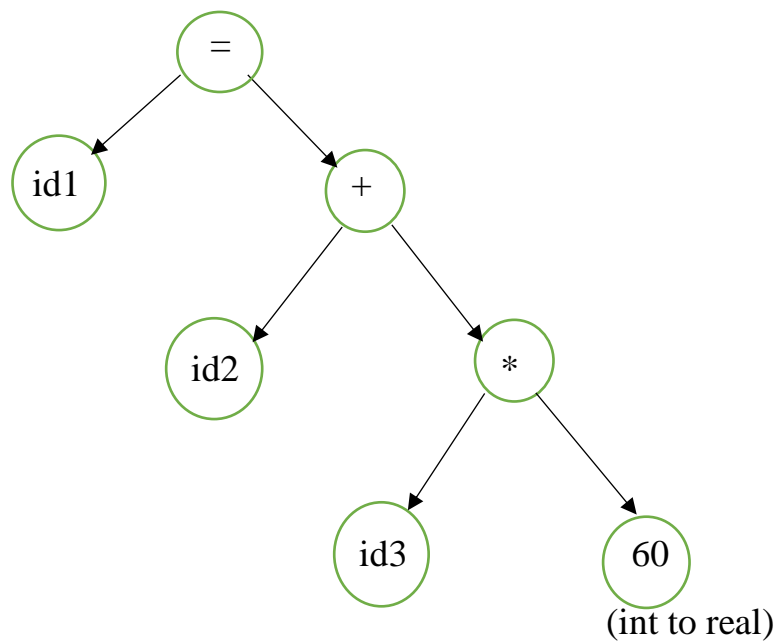
- **LEXICAL ANALYSIS:**

$\text{id1} = \text{id2} + \text{id3} * 60$

- **SYNTAX ANALYSIS:**



- **SEMANTIC ANALYSIS:**



- **INTERMEDIATE CODE GENERATION:**

t1=int-to-real(60)

t2=id3*t1

t3=id2+t2

id1=t3

- **CODE OPTIMIZATION:**

t1=id3*60.0

id1=id2+t2

- **CODE GENERATION:**

MOVF id3,R2

MULF #60.0,R2

MOVF id2,R1

ADD R1,R2

MOVF R1,id1

