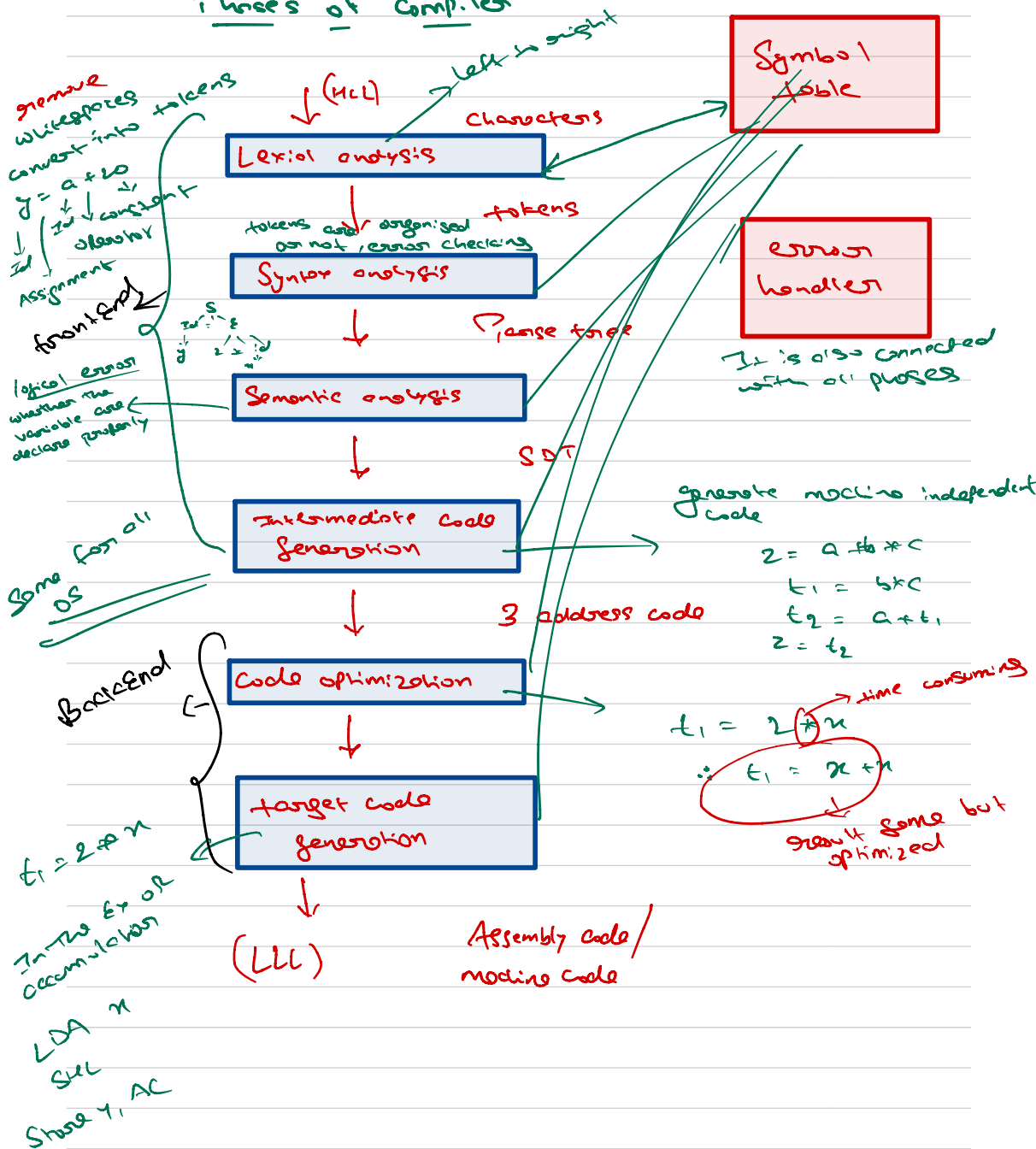


Phases of Compiler



60

$$x = a + b * 60$$

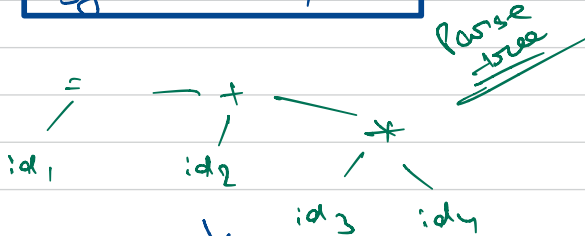
Symbol table

Lexical Analysis

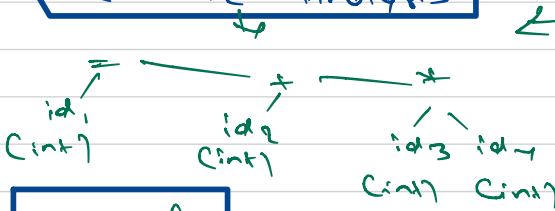
$$id_1 = id_2 + id_3 * id_4$$

$x = id_1$
 $a = id_2$
 $b = id_3$
 $id_4 = 60$ } int

Syntax Analysis



Semantic Analysis



$\rightarrow C.G.$

$$temp1 = 60$$

$$temp2 = id_3 * temp1$$

$$temp = id_2 + temp2$$

$$id_1 = temp$$

Code optimization

$$temp1 = id_3 * 60$$

$$id_1 = id_2 + temp1$$

meaning of code not changed but use less memory

Code generation

MUL R2, R1
ADD R1, R1
mov m[id1], R2