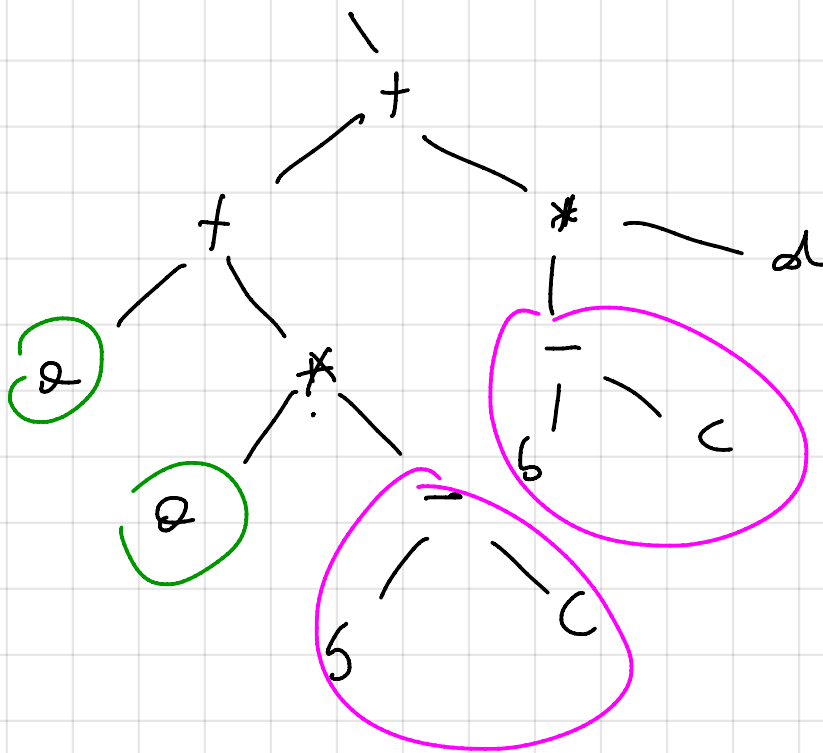


$a + a * (b - c) + (b - c) * d$



program \rightarrow block

block \rightarrow { stmts }

stmts \rightarrow stmts stmt₂ { stmt.n = new SepNode(stmts.n, stmt₂.n) }

stmts \rightarrow ϵ

stmt \rightarrow block

stmt \rightarrow if (expr) stmt₂ { stmt.n = new IfNode(expr.n, stmt₂.n) }

stmt \rightarrow while (expr) stmt

stmt \rightarrow expr;

expr \rightarrow id = expr;

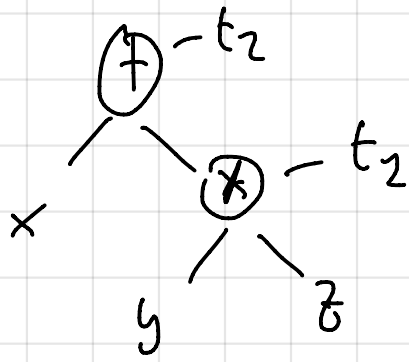
expr \rightarrow relexpr

exp \rightarrow eritexp

...

Synthesized attribute n (node)

$$x + y * z$$



$$t_2 = y * z$$

$$t_2 = x + t_2$$

param x_1

param x_2

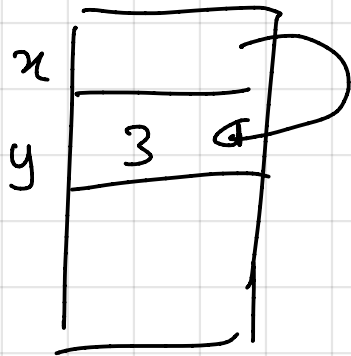
:

param x_n

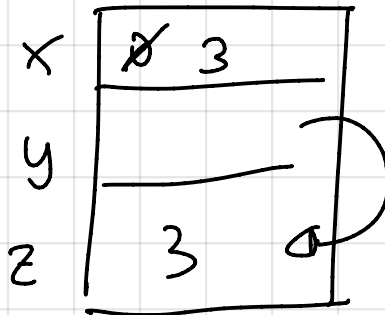
coll p m

$y = \text{coll p m}$

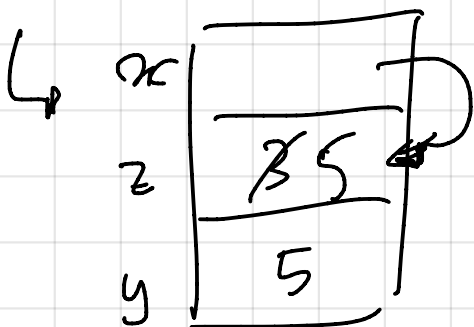
$$x = \&y$$



$$x = *y$$



$$*x = y$$



do

$i = i + 1$.

while ($a[i] < v$);

;

L: $t_1 = i + 1$

$i = t_2$

$t_2 = i * 8$

$t_3 = a[t_2]$

if $t_3 < v$ goto L

;

suppose a : array(long)

long is 8 bytes wide

size of (long)

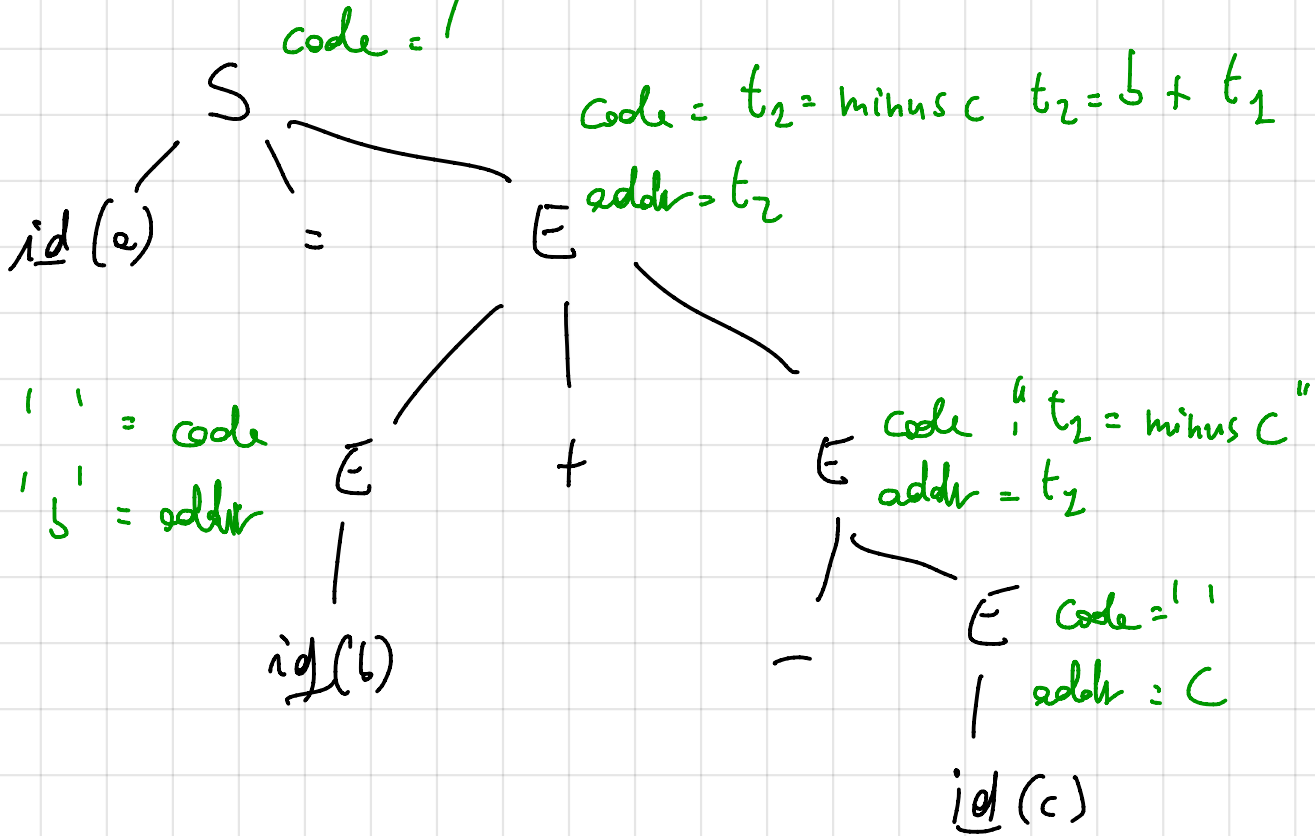
Environment

	id	type	offset
top →	x	int	0
	y	int	4

size of (int) = 4 bytes

$$a = b + -c$$

$t_2 = \text{minus } c$ $t_2 = b + t_2$ $a = t_2$



$$t_2 = \text{minus } c$$

$$t_2 = b + t_2$$

$$a = t_2$$