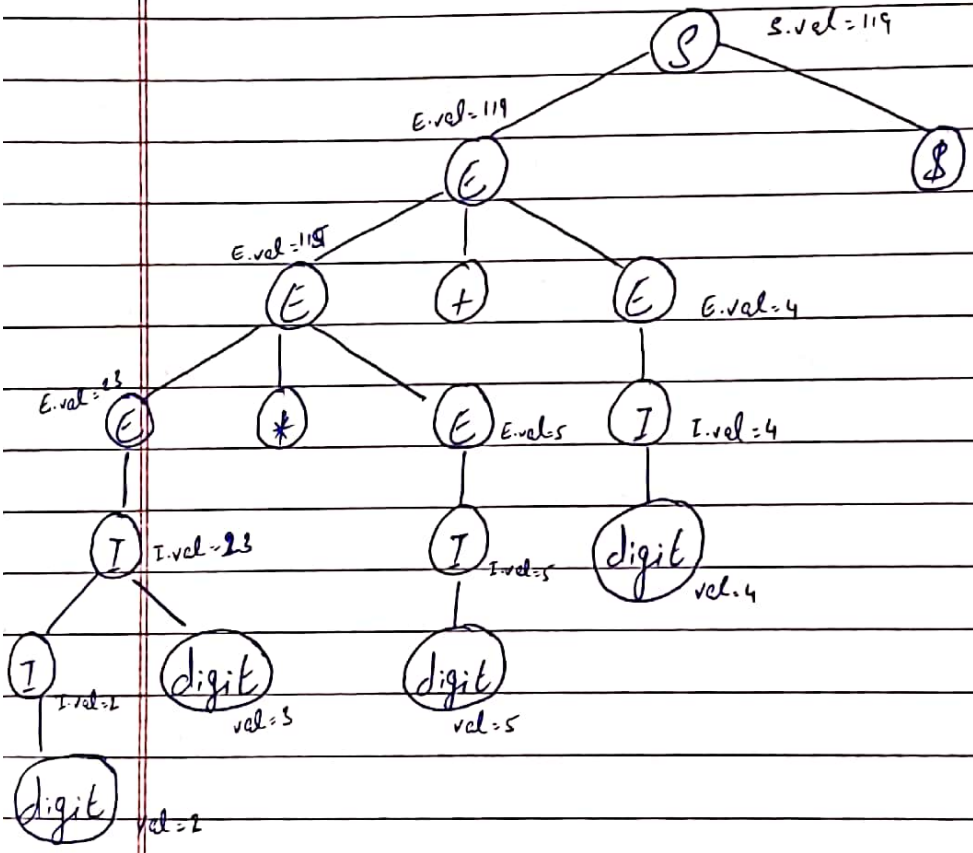
(3) The syntax directed translation scheme is a context-free grammer. Syntax direct translation is implemented by construction a parse tree and performing the actions in left to right depth first order

$S \rightarrow E\$$ { print E.val }
$E \rightarrow E + E$ { E.val = E.val + E.val }
$\quad / E * E$ { E.val = E.val * E.val }
$\quad / (E)$ { E.val = E.val }
$\quad / I$ { E.val = I.val }
$I \rightarrow I$ digit { I.val = 10 * I.val + lexval }
$\quad /$ digit { I.val = lexval }



S-Attributed & i) In this, we can use only synthesised attributes i.e only parent can take values from child.

ii) In this, we can use Bottom up parsing

iii) In this, we can write semantic rules only at the rightmost position in the R.H.S of grammer.

L-Attributed & i) In this, we can use both synthesized or inherited but only a child can take value from his left sibling.

ii) In this, we can use Top-down parsing.

iii) In this, we can write semantic rules at any position in the R.H.S of the grammer.