Analytical day-9 2/08/23 1. soo for simple desk parse tree (7+4) t (3+6) n. S-> En B - E +T | E TATAFIT/FIF F + CE) ldigit. parse tree: (7+u)\* (3+6) (28.81 - HISSES Soldalina # boo + Materage not das x+(3+x+x+x). S'moltoviolo. I dairy } 268. Principality + nother + b. 13 = nother b. J. T FIGT F fooitor state of a degrotion 7 7 50 distributed of (E. Ditoinell of a nothing to derivation) For a devivortion = of deproverion } 31 [ a- Instruction of : suller of x co a for which is not desploying to down of

R. praveen garsh. S -> Edn.val = E. Vala E > El 2 E. val = El. valg + T LE. val = Eval + T-valg TE.val=T.valg T > TI (T. val = T. val) \* F (T. val = T1, val + F-val) F of T. val = F. val F > ( E { F. val = E. val}) | digit { F. val = digit value (2) construct the Syntax tree for Expression a = b \*c + b \*c [ + 3 ] & doors a = 10 + ci+ 6 + 6 = 0 = 0 + + 1 1 12 : 59 = 000 State & CES & \*

Inpat: +4 2 3 ilustrate the bottom up Evaluation for softibute. 3+6+4 S > EN TIPID C T & T 29 MR E + E+T [ 1 1 3 T-> T+F (1 / 1) T >T/F ( ) + > 1 : 7 9 > 12 E DE 2 control por E > digits.

Scanned with CamScanner

C. DAU, CCC BULLER Grammar: - Replace. glov 1 - R. praveen = -Input: 5 \* 6 + 4 ov. To lov 7) 7 to flow J = lov of IT & T step1: shift the digit in stack. stack: [5] F -> ( E St. val = E val 3) Input: #6+4 ste P2 1.7 shift the \* In stack. Stack: (5, \*] > + + > + d = 0 Input: 6+4 step3: shift the 6 number in stack T-) F(F+) F-) d'9) Stack : (5, \*, 6) Input: +4 Step 4: - Redu + > T stack o (E) Inpat: +4 Step Situation ( bettor top Evaluation set storten) Steps + + + + digit [E,+,E] T+3+3 Step7: Redu TSF CF+, T) 7 + T 6 T Step 8: Red ED ETT CS) Reduce S > EM.

4. SOD scheme that translates

R. praveen gansh.

5\*7 8\*4.

## A. Grammar:

1. Input 5 \* 7

s. inh = E.val

El.inh = T.val

TI. inh = F. val

Tz. inh = F-val

F1. val= 5, F1. Code = 5

Fl. val= 7, F2. Code= 7

T2. val=7, T2. code=7

T1. val = 5, T1. lode=5

E, val = 5, E1. Code = 5

E. val = 5, E. Code = 5

output = 57 K

2. Input 8 + 9.

S. inh = E.val

El. inh = T.val

Thinh = Fivay

Tz.inh = Fz.val

F1. val= 8, F1. code = 8

F2. val=4, F2. Code = 4

T2. val=4, 12. Code=4

E. val = 8, E1. code = 8

E.val = 8, E. code = 8

out put: 84 %.