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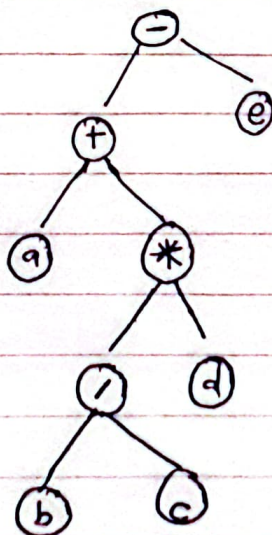
ADM : SCT222-0466/2023

ASSIGNMENT 1

1) Convert to an Expression tree using a stack
 $a + b / c * d - e$

Incoming token	stack	Postfix
a		a
+	+	a
b	+	ab
/	+ /	ab
c	+ /	abc
*	+ * +	abcd
d	+ *	abcd
-	-	abcd*+
e	-	abcd*+e
		abcd*+e

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



(b) Convert $a + b / c * d - e$ to postfix expression by hand

$a + b / c * d - e$	
$a + b / c d * - e$	$abcd / d * + e -$
$abcd / d * + - e$	$= abcd / d * + e -$

c Convert $+a*bc$ into an infix using a stack

Token	stack	infix
c	c	-
b	cb	-
*	-	$(b*c)$
a	$(b*c), a$	
+	-	$a+(b*c)$

$a+(b*c)$