


Zoom Size: 100% ▼

< Previous

Page: 5 / 8

Next >



Let's trace the algorithm for the below input infix expression which is parenthesized

Input expression: $(A + (B - C) * D)$

Stack	Current Input symbol	P_TOS(TOS) > P_INP(symbol)	Postfix expression	Remarks
<div> </div> <div> </div> <div> </div> <div>#</div>	($-1 \neq 9 \rightarrow$ push('(')		Precedence of TOS is less than the current input symbol '('
<div> </div> <div> </div> <div>(</div> <div>#</div>	A	$0 \neq 7 \rightarrow$ Push('A')		Precedence of TOS is less than the current input symbol 'A'
<div> </div> <div> </div> <div>A</div> <div>(</div> <div>#</div>	+	$8 > 1 \rightarrow$ Postfix_expr = pop()	A	Precedence of the TOS is greater than the precedence of the current input symbol '+'
<div> </div> <div> </div> <div> </div> <div>(</div> <div>#</div>	+	$0 \neq 1 \rightarrow$ Push('+')	A	Precedence of TOS is less than the current input symbol '+'
<div> </div> <div> </div> <div>+</div> <div>(</div> <div>#</div>	($2 \neq 9 \rightarrow$ Push('(')	A	Precedence of TOS is less than the current input symbol '('
<div> </div> <div> </div> <div>+</div> <div>(</div> <div>B</div> <div>#</div>	B	$0 \neq 7 \rightarrow$ Push('B')	A	Precedence of TOS is less than the current input symbol 'B'

5

Views : 15784

247 0

[Conversion of an Infix to Postfix Expression Demo \(/?q=MULNCourseBook/listDetailedCBLearningContents/178099/cidb/full/view/153700/431513/431502/39729\)](/?q=MULNCourseBook/listDetailedCBLearningContents/178099/cidb/full/view/153700/431513/431502/39729)[Data Structures and Algorithms > \(/?q=MULNCourseBook/listDetailedCBLearningContents/178099/cidb/full/view/153785/431527/431502/39729\)](/?q=MULNCourseBook/listDetailedCBLearningContents/178099/cidb/full/view/153785/431527/431502/39729)