

Stack : infix to postfix

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1) start scanning from left to right

2) If(current element is an operand)

Append it to the postfix expression

Else

// If(current element is an operator)

While(stack is not empty && priority of topmost element \geq priority of current element)

{

Pop element from the stack and append it to postfix expression

}

Push current element onto the stack.

Infix :

$5*3/2*6/4+7-3+8/2$

Stack:

Current element :

Postfix expression:

$53*2/6*4/7+3-82/+$

3) Repeat the above steps till end of infix expression

4) Pop all the remaining elements from the stack one by one and append them to postfix expression

infix $a+b \rightarrow a, b$ operands

$+$ \rightarrow operator

$+ab \rightarrow$ prefix

$ab+ \rightarrow$ postfix

$(2+5*3) \rightarrow$ prefix
postfix

$5*3/2*6/4+7-3+8/2$

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
5 * 3 / 2 * 6 / 4 + 7 - 3 + 8 / 2

53* / 2 * 6 / 4 + 7 - 3 + 8 / 2

53*2/ * 6 / 4 + 7 - 3 + 8 / 2

53*2/6* / 4 + 7 - 3 + 8 / 2

53*2/6*4/ + 7 - 3 + 8 / 2

53*2/6*4/ + 7 - 3 + 82/

53*2/6*4/7+ - 3 + 82/

53*2/6*4/7+3- + 82/

$53*2/6*4/7+3-82/+$

$53*2/6*4/7+3-82/+$ \rightarrow postfix exp.