

Stack : infix to postfix

26 April 2023 17:59

- 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 >= priority of current element)
{
Pop element from the stack and append it to postfix expression
}
Push current element onto the stack.
- 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 :

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

Current element : /

Postfix :

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

Stack:

/
+

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/+

Postfix :

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