WAP to convert a given valid parenthesized infix arithmetic expression to postfix expression. The expression consists of single character operands and the binary operators + (plus), − (minus), * (multiply) and / (divide).

Algorithm

1. Push "(" and add ')' to the end of stack.

2. Scan exp from left to right and repeat step 3 to 6 for each element of exp until stack is empty.

3. If an operand is encountered, add it to res.

4. If a left parenthesis is encountered, push it into stack.

5. If an operator is encountered, then:-
   1. Repeatedly pop from stack and add to res (on top of stack) which has the same precedence as or higher precedence than operator.
   2. Add operator to stack.
   [END of if]

6. If a right parenthesis is encountered, then:
   1. Repeatedly pop from stack add to res each operator (on the top of stack) until a left parenthesis is encountered.
   2. Remove the left parenthesis.
   [END of if]
   [END of if]

7. END