

- 1) start scanning from left to right
- 2) If (current element is an operand)
  - Append it to the postfix expression
- 3) Else if (current element is opening bracket '(' )
  - Push it onto the stack
- 4) Else if current element is closing bracket ')'
  - Pop elements from the stack and append them to postfix exp till its corresponding opening brackets does not occur
  - Pop opening brackets from the stack and discard both the brackets

Infix expression :

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

stack


Current element :

Postfix expression:  $59+4862/-*-173-\$+$ 

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  
 }

 $59+4862/-*-173-\$+$ 

Push current element onto the stack.

- 5) Repeat the above steps till end of infix expression
- 6) Pop all the remaining elements from the stack one by one and append them to postfix expression

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

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

 $5+9-4*(8-6/2)+1*(7-3)$  $5+9-4*862/-+1*(7-3)$  $5+9-4*862/-+1*73-$  $5+9-4*862/-+173-\$$  $5+9-4862/-*-173-\$$  $59+-4862/-*-173-\$$  $59+4862/-*-173-\$$ 

( )  
 $\$ \rightarrow ^$   
 $* / \%$   
 $+ -$

59+4862/-\*-173-5+ → output