

- 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
- 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.

Infix expression :

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

Current element :

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

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

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

$\begin{matrix} ( ) \\ \wedge \\ * / \% \\ + - \end{matrix} \rightarrow \text{power}$

$\begin{matrix} \textcircled{6} & \textcircled{7} & \textcircled{5} & \textcircled{2} & \textcircled{1} & \textcircled{8} & \textcircled{4} & \textcircled{3} \\ \underline{5+9-4} & \underline{*(8-6/2)} & \underline{+1} & \underline{*(7-3)} \end{matrix}$

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

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

$\underline{59+4862/-*-173- \$ +} \rightarrow \text{postfix}$