

First of all, I am sorry that I couldn't manage time to give you the pseudo code earlier. Actually, the pseudo code below is not mine as well. I found it on internet. However, I find it very much easy to understand and easy to implement. Hope, this will somewhat help.

For Infix to Postfix Conversion:

Procedure:

1. Scan the Infix string from left to right.
2. Initialize an empty stack.
3. If the scanned character is an operand, add it to the Postfix string.
4. If the scanned character is an operator and if the stack is empty push the character to stack.
5. If the scanned character is an Operator and the stack is not empty, compare the precedence of the character with the element on top of the stack.
6. If top Stack has higher precedence over the scanned character pop the stack else push the scanned character to stack. Repeat this step until the stack is not empty and top Stack has precedence over the character.
7. Repeat 4 and 5 steps till all the characters are scanned.
8. After all characters are scanned, we have to add any character that the stack may have to the Postfix string.
9. If stack is not empty add top Stack to Postfix string and Pop the stack.
10. Repeat this step as long as stack is not empty.

Pseudo code

1. S: Stack // Mane s name ekta stack declare koro
2. while(more tokens) // Token mane single character or operator
3. x<=next token
4. if(x == operand) // operand mane character a+b , a,b operand
5. print x
6. else
7. while(precedence(x)<=precedence(top(s))) // precedence function call, ekhane x kintu operator, x operand holeto if ei print hoye jeto
8. print(pop(s))
9. push(s,x) // stack e x ke push koro
10. while(! empty (s))// jotokkhon stack khali na hoy.
11. print(pop(s))

Try it. Or try yourself.

For Infix to Prefix Conversion:

Tumi Jodi uporer postfix ta kore felo, then just oi code ke use korei prefix o convert kora jay. For example.

Infix expression given = $(A+B^*C)*D+E^5$

Step 1. Given infix expression take reverse kore felo just like this,

$5^*E+D^*)C^*B+A($

Step 2. Erpor, prottek '(' ke ')' ebong prottek ')' ke '(' kore felo

$$5^E + D * (C^B + A)$$

Step 3. Ebar Step 2 te ja pela, mane reverse kora expression take uporer POSTFIX CONVERSION code er maddhome postfix e convert koro..dekhba seta prefix hoye gese.

$$5E^DCB^A+*+$$

Step 4. Finally, step 3 ta dei expression paiso, shei expression ke abar reverse koro and taholei prefix expression peye jaba.

$$+*+A^BCD^E5$$

Ekhane just tomake ekta string reverse korar code korte hobe, bakita postfix conversion er code ei kore dibe.