

Infix to Postfix Pseudocode

Carrano, 4th edition, pp. 310-311

```
for (each character ch in the infix expression){
    switch(ch){
        case operand:    // append operand to end of PE    操作数就直接进结果字符串
            postfixExp = postfixExp + ch
            break
        case '(':         // save '(' on stack    (就继续进栈)
            aStack.push(ch)
            break
        case ')':         // pop stack until matching '('
            while (top of stack is not '('){
                postfixExp = postfixExp + (top of aStack)    遇到)就pop直到遇到(
                aStack.pop()
            } // end while
            aStack.pop()    // remove the '('
            break
        case operator:    // process stack operators of    如果是操作符
                        // greater precedence
            while (!aStack.isEmpty() and
                top of stack is not '(' and
                precedence(ch) <= precedence(top of aStack)){
                postfixExp = postfixExp + (top of aStack)
                aStack.pop()
            } // end while
            aStack.push(ch)    // save new operator
            break
    } // end switch
} // end for
// append to postfixExp the operators remaining on the stack
while(!aStack.isEmpty()){
    postfixExp = postfixExp + (top of aStack)
    aStack.pop()
} // end while
```