A mathematical expression is given without parentheses. Design an algorithm to parenthesize the expression such that the value of the expression is maximized. For example, consider the expression: 2+7*5. There are two ways to parenthesize the expression 2+(7*5) = 37 and (2+7)*5 = 45, so in this case, your algorithm should output the second expression. Here, you may assume the given expressions contain only 3 kinds of binary operators '+', '-', and '*'.

Input: expression Ex: 2+7*5-3*6

Output: (((2+7)*5)-3)*6 or ((((2+7)*5)-3)*6)

1 <= expression's length <= 30

if there are several solutions, output one of them.

基本題 ： 只考慮正整數、加法及乘法
加分題 ： 考慮負整數及減法
需繳交兩份檔案，程式碼及報告。
報告內容請包涵 ：
1. 演算法設計，用了什麼演算法籍資料結構
2. Pseudo code 不要貼整段程式碼上來
3. 時間複雜度分析

檔名 ： 學號_姓名_hw3.cpp, 學號_姓名_hw3.pdf
e.g. 105502518_邵惟民_hw3.cpp, 105502518_邵惟民_ hw3.pdf

繳交期限 ：4/15 (四) 23:55

加分題 Test case :

(1) Input: 5-8+7*4-8+9 ; Output: 5-((8+7)*(4-(8+9)))

(2) Input: -11+22--11-22 ; Output: -11+(22-(-11-22))

(3) Input: 2-7*5+1-4+8*3 ; Output: 2-(7*(5+(1-((4+8)*3))))