241. Different Ways to Add Parentheses

給出一個字符串，找出所有加括號情況下的得數，只考慮+-\*

Input: "2-1-1".

((2-1)-1) = 0

(2-(1-1)) = 2

Output: [0, 2]

public class Solution {

public List<Integer> diffWaysToCompute(String input) {

List<Integer> res = new ArrayList<Integer>();

for (int i = 0; i < input.length(); i++) {

char c = input.charAt(i);

if (c == '-' || c == '+' || c == '\*') {

String a = input.substring(0, i);

String b = input.substring(i + 1);

List<Integer> al = diffWaysToCompute(a);

List<Integer> bl = diffWaysToCompute(b);

for (int x : al) {

for (int y : bl) {

if (c == '-') {

res.add(x - y);

} else if (c == '+') {

res.add(x + y);

} else if (c == '\*') {

res.add(x \* y);

}

}

}

}

}

if (res.size() == 0) res.add(Integer.valueOf(input));

return res;

}

}