#### 1. What are the possible solutions for this problem?

Understand definition of MergeSort and Prefix Expression is the best solution.

# 2. How do you solve this problem?

For question 1, need to understand about Mergesort. It needs to divide 2 parts and set (Left part, right part). Left part is Left  $\sim$  mid and right part is mid+1  $\sim$  right. After that use while and list to finish.

For question 2, need to understand about Prefix Expression. Use string and switch.

### 3. Why is your solution better than others? (Some test results can be included)

Question 1, I haven't saw others solution but for me, my answer is the best option for me to do. Make a list first, set interval with while/for and merge together When I finished testing in OJ, I figured out my time, and bytes was pretty low. So for me, I think it is the best solution.

Question 2, there has many people who did with C++ but I wanted to do with java. I haven't saw others solution neither but only few people got 100 points with using java. Little angry with I couldn't got 100 points, but I still don't know why I got WA in 3 parts.

## 4. How do you test your program?

Both I kept used OJ to solve my questions.

Of course, if it had some problems, I used index to fix bugs.

## 5. What are the possible further improvements?

For question 1, I think there is no improvements.

For question 2, when I made question first, I got 30 points.

because I couldn't made question 2 so I don't know about further improvement. I have done with java language but if I used C++ I think I could make that. (Trying to use java whether than C++ now and I used java in question 1, so I just used java in question too.)