QtCalc1:
If in an expression, the number of left parentheses and the number of right parentheses don't match, the unparsed part will be labeled basing on different circumstances.

Basing on TA's advice, I use '_' to indicate the missing of right parentheses(e.g. ('((3*9)+(4/(7-(8*6))))*(7-(6.2+6))_'), not consider how many ')' missing;
If left parentheses missing, the whole expression will be labeled as red(e.g '3*9)+(4/(7-(8*6))))*(7-(6.2+6)))');

For example, "(((3*9)+(4/(7-(8*6))))_*(7-(6.2+6)))" the right parentheses with underline is missing. When my parse function meets more than one left parentheses, it will first try to find a operator(in this case '*'), then split the expression into left and right parts. However, this time it can not find the operator successfully, so my calculator only parsed the first left parentheses.

And other invalid expressions cases:
Missing number: (8*)
More parentheses: (8*((7)
And so on.

QtCalc2:
I only store these valid expression.