Scheme Programming

Task:

- You will define a calculator for simple arithmetic expressions in scheme.
- For example, when typing (calculator '(1 + 2)), scheme interpreter will print 3.
- The calculator will accept expression of any length, and the expression associates to the right.
- For example, in (calculator '(1 + 1 - 2 + 3)) the expression is interpreted as (1+ (1 - (2+3))), hence the value is -3.

Assumtion:

- You can assume that the expressions have + and - operators only. In addition, there are no brackets in expressions.

The syntax for the expression is:

exp ::= number | exp op exp

op ::= + | - | * | /

Note that the arithmetic expression supports four operators.