Expression Evaluator

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Algorithm - evaluate

1. *Set* **operand stack** to empty.
2. *For each* **token** in the **token list**
3.   *If* the **token** is an **operand** *then*,
4.   Push it onto the **operand stack**
5.   *Else*
6.   the **token** is an **operation**
7.   *If* the **operation**'s number of arguments > the size of the **operand stack** *then*,
8.   *Exception* "**Insufficient # operands for operation**"
9.   Pop the correct number of operands from the **operand stack** (operands are popped right-to-left).
10.   *Perform* the **operation** on those **operands**
11.   Push the **result** on to the **operand stack**
12. *If* the **operand stack** has more than one element *then*,
13.   *Exception* "**Too many operands for the number of operations**"
14. *If* the **operand stack** is empty *then*,
15.   *Exception* "**Too many operations for the number of operands**"
16. Pop the final answer from the **operand stack**