

# Eval

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graph LR; Eval[Eval] --> ReadOp[Read Operator<br/>number i]; ReadOp --> ApplyOp[Apply Operator to current stack values<br/>Example: if operator +<br/>value[i] += value[i-1]]; ReadOp -- "if i = number of stack elements" --> Return[return result = value[i]]; ApplyOp --> ReadOp;
```

The flowchart illustrates the logic of the Eval function. It begins with a yellow box labeled 'Eval'. An arrow points to a light blue box labeled 'Read Operator' with 'number i' below it. From this box, an arrow points to a larger light blue box labeled 'Apply Operator to current stack values'. Inside this box, there is an example: 'Example: if operator +' in blue text, followed by 'value[i] += value[i-1]' in red text. A feedback arrow loops from the top of the 'Apply Operator' box back to the 'Read Operator' box. Another arrow points from the 'Read Operator' box down to a light blue box labeled 'return result = value[i]', with the text 'if i = number of stack elements' positioned above this arrow.

Read Operator

number i

Apply Operator to current stack values

Example: if operator +

$\text{value}[i] += \text{value}[i-1]$

if i = number of stack elements

return result =  $\text{value}[i]$