Program 1

You are write an interpreter in **Pascal** that reads expressions from "std in" and prints out all intermediate computations and the final result of the expression.

The expressions will be provided in postfix notation with one or more spaces separating symbols. The following are examples:

$$\begin{array}{lll} a+b & => & a \ b + \\ a+b*c+d & => & a \ b \ c*+d + \\ (a+b)*(c+d) & => & a \ b+c \ d+* \end{array}$$

All expressions will be valid

Symbols will consist of integers, math symbols (+, -, *, /), and spaces

Your interpreter will:

- For each line of input and before beginning computations, read the input character at a time and build an internal **line buffer**
- Transfer items from the line buffer to the **computation stack** as needed
- Show all intermediate computations
- Show final results

In designing your program, you must use at least

- One globally defined/referenced variable
- One non-locally defined/referenced variable

Retrieve, install and use "Free Pascal." Expect more refinement to the problem in class as questions are asked.