<u>Postfix Expression Evaluation:</u>

Algorithm - Scan from left to right and create a stack of input symbols. (Assume we are using binary operator.)

- 1. If the input symbol is an operand, push it into the stack.
- 2. If the input symbol is an operator **Op** then,
 - a. pop twice from the stack and assign them to variable ${\bf x}$ and ${\bf y}$ respectively.
 - b. Evaluate $(x \ \mathbf{0p} \ \mathbf{y})$ and push it back to the stack.
- 3. When there is no more inputs, display the value in the top of stack as the evaluation result.

Example

Input expression: ab+c*

Input	Operand Stack	Operation
а	а	Push a
b	b	Push
+	(a + b)	Pop b and a, evaluate (a+b) and push.
С	(a+b) c	Push c
*	((a+b)*c)	Pop c and (a+b), evaluate ((a+b)*c) and push.

When the input scan completed, output the result ((a+b)*c).