**Algorithm evaluatePostfix (postfix expression)**

// evaluates a postfix expression.

valueStack = a new empty stack

while (postfix has characters left to parse)

{

nextCharacter = next nonblank character of postfix

switch (nextCharacter)

{

case operand: valueStack.push (value of the variable

nextCharacter)

break

case ' + ':

case ' - ':

case ' \* ':

case ' / ':

case ' ^ ': operandTwo = valueStack.getTop()

valueStack.pop();

operandOne = valueStack.getTop()

valueStack.pop();

result = the result of the operation in

nextCharacter and its operands

operandOne and operandTwo

valueStack.push(result)

break

default:break

}

}

return valueStack.getTop()