Homework #2

0	||
1	&&
2	< <= == > >= !=
3	+ −
4	* / %
5	!

Consider the precedence levels of the relational operators, logical operators, and the arithmetic operators in our Biola language as depicted above. Read the online documents about the infix-postfix conversion and the postfix evaluation first and then do (i) to (v) in the following.

Go through the steps in infix-postfix conversion to convert the following two infix expressions into their corresponding postfix expressions:

   i.   **1 + 2 * 3 − 4 / 2**
  ii.   **5 + 6 * (4 − 3) / (2 + 1)**

Go through the steps in postfix evaluation to evaluate the following two postfix expressions:

iii.	5.0	3.0	7.0	4.0	1.0	2.0	+	/	−	*	+
iv.	1.0	2.0	3.0	*	+	4.0	2.0	/	−		

Convert the following infix expression into the corresponding postfix expression, and then evaluate it. Show both the postfix expression you got and the result of the postfix evaluation.

   v.   **1 + 2 * 6 < 4 * 3 − 5   && 7 != 8**