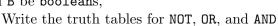
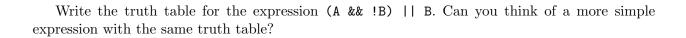
Boolean Logic and Expressions

CSCI 51, Stough February 5, 2009

Recall that in Java, a boolean is a primitive data type with two possible values, true(1) or false(0). To know whether some expression is true or false (e.g., "the operator entered is the '+' sign") is necessary for encoding some algorithms. The "if" and "if/otherwise" conditional structures require the evaluation of some boolean expression. There are two kinds of operators that return booleans, the boolean operators (that is, operators on booleans) NOT (!), OR (||), and AND (&&), and the relational operators that operate on numbers, ==, !=, <, >, <=, and >=. Let A and B be booleans,





Write the truth table for the expression ! (A && B). How about !A | | !B.

Write a boolean expression that states: either 4 times x is less than y or y is between 0 and 100, inclusive.