* The purpose of this lab is to simulation a combinational circuit using software.
* Submit the Java file to the appropriate D2L submission area.
* Create a comment header, at the top of the document, stating information about this lab. Include:
  + Your name
  + Course number (CSC242-01)
  + Week lab was assigned.
  + One- line description of the lab

Program Requirements

1. Name the class “**Week9\_SimulateGates”.**
2. Input: There will be no inputs entered by the users.
   1. The number of SIGNAL lines will be given (3: x, y, and z)
   2. The circuit to simulate will be given.
3. Processing
   1. Simulate the gates in the given circuit.
   2. Represent each gate with a Logical Boolean expression.
      1. For example, an OR gate in Java would look like: b**oolean result = x || y**;
   3. Produce results for all 8 combinations of True and False for the inputs x, y, z.
4. Output
   1. The java program will output a Truth Table.
   2. The output shall have 7 columns: x | y | z | And A | Xor B | Xor C | Or D.
   3. Display a heading for these columns.
   4. Output 8 rows of 1’s and 0’s. Determine how to turn the Boolean variables, from True and False to 1 and 0.
5. Testing
   1. Extensively test your program. Test with all type of integers values; valid and invalid data.
   2. I will use a set of test data to evaluate your program.

