**ECE 1111: Engineering Computation I**

**Homework No. 4: Basic Logical Operators**

**Goal:** Demonstrate that you understand how to use basic logical expressions.

**Description:** Create a file containing ASCII text. For example:

**nedc\_000\_[1]: more v.txt**

**# an example file**

**#**

**this is a sample file**

**27.0**

**another line of text**

**3**

**yet another line of text**

The tasks in this homework assignment are:

1. Write a program that reads any file and prints the line number and the contents of each line.
2. If a line contains a number between 0 and 100, print "line number: \*\*\*> the value is" followed by the value rather than just the number. Use a format that contains 4 decimal places. For example, your output could look like this:

**3: \*\*\*> the value is 27.0000**

1. If the line contains a number between 0 and 100, and it appears on the third line in the file, print "line number: \*\*> this is your lucky day!"
2. If a line contains a negative number, print "line number: ==> found a negative number: <value>". Use a format that contains 4 decimal places.
3. If the first character of the line is a "#", do not print the line.

Submit your code and a demonstration that it operates correctly as a pdf file following the template provided in class. Provide sufficient evidence that your code works for all reasonable test cases.