All work must be original and by yourself.

Name: _____

In class on Tuesday, you are going to be asked to do the following: *Using your NXT brick, write a program that displays both the current (i.e., most recent) and maximum of a series of volume measurements by the sound sensor. It should run in a continuous loop. Pressing the right button should reset the maximum volume value. Pressing the left button should terminate the program. Consider adding extra features as well (such as displaying several of the most recently measured values as well as the maximum measured value).*

For this homework, you are to flow chart this process, as described in class.

1) What variables does your program require? Name and describe this (these) variable(s).

2) Using the symbols discussed in class, draw (on a separate piece of paper) a flow chart of the process. It should include steps for input (measurement and buttons), output (display), decision making, and processing (modifying variables).

Start/Stop

Basic Symbols   Decision   Process   Input/Output

Examples
of their use

yes ← x>y?   y=x   x = Read Sound Level

yes ← button pressed?   x=x+1   Display x to screen
       no