

Lab 1 Demo Requirements Checkoff

NTC write!

Team Name: group H'
11:30-11:40 th

Third box:

Cable length/construction (2-meter length, well-constructed) Y

Sensor protected from water damage Y

Has all required components (7 segments display, button, battery, power switch) Y

Construction (enclosed, physically robust) Y

Cable connectors have proper terminating connectors Y

On/off switch works properly Y

Properly displays temperature on LEDs when button is pushed (no noticeable delay) Y

Negative temperatures displayed

Notifies user if sensor not plugged in Y

Begins normal operation automatically when sensor is plugged in Y

Computer:

Displays "unplugged sensor" message if sensor is unplugged Y

Displays "no data available" message if box is turned off Y

User can turn LED display on/off from computer interface Y

Properly displays temperature on screen (updated once per second) Y

User can select display in degrees C or degrees F Y

Displays graph of past 300 seconds of data in degrees C Y

Graph vertical axis range is correct (10 degrees C to 50 degrees C) Y

Graph horizontal range is correct (300 sec to 0 sec)

Graph scrolls horizontally—latest temperature on right

Graph size is scalable with mouse

(Some glitches;
occasionally displays
a zero temp on graph)

Text message:

Text message sent to specified number when temperature falls outside of specified range

Range and phone number can be changed via user interface

Separate messages for high and low temperature