## 6.002 Demo# 15 Digital Memory Lecture 15

## **Agarwal Fall 00**

Purpose: This demo looks at designs of digital memory using a capacitor and inverters (buffers). Several versions are examined, with various loading properties (memory loss over time, memory loss with successive reads, etc.) A demo setup with leds on output lines allows the class to observe values on wires.

Steps:

**Description: Digital Memory** 

We install the components shown next page Fg1, on the Digital Board to show that the capacitor can retain the voltage when the supply is disconnected from the circuit. This is demonstrated by viewing The status of those two inverters.

Note: see schematic diagram next page for more detail.

## Note: Capacitor, Resistor and Switch are kept in the cabinet inside demo room

Cite as: Anant Agarwal and Jeffrey Lang, course materials for 6.002 Circuits and Electronics, Spring 2007. MIT OpenCourseWare (http://ocw.mit.edu/), Massachusetts Institute of Technology. Downloaded on [DD Month YYYY].