IT-209: Lab Manual

Lab – 1

Week of August 8, 2011

General Instructions:

- Students are not required to maintain any lab notebook for this course. However, it would be advisable to make a note of neater techniques and tricks.
- Please ensure that the code is well commented.
- At the end of each lab, the students would be graded on a scale of 10.
- Students can work on the additional problem(s) in case they have managed to complete the normal lab problems. In otherwise case, it would be a take home assignment. This problem needs to be submitted to the e-mail id it209ta@gmail.com.

The purpose of this week's lab is to acquaint oneself with basic load-store operations.

Target Device: NXP LH75400
Problems:

1. Store a number at location 0x5000.
2. Store a 0xAEF67D90 at location 0x4020. Use DCD for the same.
3. Add two numbers stored at two consecutive memory locations and store the result at some other location in the memory.
4. Write a program to swap two numbers stored in memory.
5. Determine whether the value placed at 0x5000 is even or odd. If the number is odd store 0x0001 in memory location 0x5012 else store 0x0002 in memory location 0x5012.
6. Count the number of 0's in the value placed at memory location x5000 and store it at location x5012.
7. Additional Problem: Find the GCD of two numbers placed in the memory.