## ICS 233, Term 081

## **Computer Architecture & Assembly Language**

## Quiz# 4

## Date: Saturday, Dec. 20, 2008

**Q.1.** Given that **Multiplicand=1011** and **Multiplier=1011**. Using the **refined signed multiplication** hardware, show the **signed** multiplication of **Multiplicand** by **Multiplier**. The result of the multiplication should be an 8 bit **signed** number in HI and LO registers. Show the steps of your work by filling the given table.

Iteration		Multiplicand	Sign	Product=HI,LO	
0					
1					
2					
3					
4					

**Q.2.** Given that **Dividend=1111** and **Divisor=0101**. Using the **refined unsigned division** hardware, show the **unsigned** division of **Dividend** by **Divisor**. The result of division should be stored in the Remainder and Quotient registers. Show the steps of your work by filling the given table.

Iteration		Remainder	Quotient	Divisor	Difference
0					
1					
2					
3					
4					