QUIZ #02 CSCI-410 Spring 2013

- 1. When using the method of repeated division by the number base to convert a number from one base to another: (a) Do we divide by the number base we are converting from or the number base we are converting to? (b) Do we do the math in the number base we are converting from or the number base we are converting to? (c) Should we use this for converting from base ten to another base, or from another base to base ten?
 - A) We use the number from the base that we are converting to.
 - B) We do the math in the base that we are converting from.
 - C) Converting from base10 to baseX, where X is some other base.
- 2. When using the method of repeated multiplication by the number base to convert a number from one base to another: (a) Do we multiply by the number base we are converting from or the number base we are converting to? (b) Do we do the math in the number base we are converting from or the number base we are converting to? (c) Should we use this for converting from base ten to another base, or from another base to base ten?
 - A) We use the number from the base that we are converting from.
 - B) We do the math in the base that we are converting to.
 - C) We should use this to convert from BaseX, to Base10.
- 3. Convert 9876543210 to base 2, 8, and 16. In your base-2 answer, leave a space between each set of four bits (counting from the right).

 $(10\ 0100\ 1100\ 1011\ 0000\ 0001\ 0110\ 1110\ 1010)_2$

(2 4CB0 16EA)16

(1114 5401 3352)8