**CS 3173 Assignment 2 12 points**

**chapter 1 and 2**

**Due 9/7**

**Email your homework to me at** [**harringp@nsuok.edu**](mailto:harringp@nsuok.edu)

**You can email your java file, copy your code into windows notepad and email the text file, or copy and paste your java file into Word and email it if you prefer.**

**Part 1: Problem Solving (6 points):**

1. What is the minimum number of bits needed to represent 324510 using unsigned binary representation?
2. What is the largest possible integer that can be represented with a 10-bit unsigned binary number?
3. Convert to decimal.

100110012

1. Convert each of the following values to an 8-bit unsigned binary value.
   1. 4510
   2. 15810
2. Convert the following numbers to hexadecimal.
   1. 10001110001111010112
   2. 011011110110100100012
3. Convert each of the following hexadecimal values to binary.
   1. DABC16
   2. 27BF16

**Part 2: Programming in Java (6 points):**

Continue the program from assignment 1 and add the file input output functionality if it was not added to assignment 1. Be sure to use try..catch statements for file input and output, which is required by Java. If you already did this in assignment 1, please go ahead and copy and paste your code from assignment 1 into this document.