CS1203 Assignment 2

Fall 2020
Due **Monday September 28th** before **4pm Atlantic** in the Desire2Learn dropbox.

Note: All answers need to be contained in a single document using a word processor. For answers that require work to be shown you may choose to take a picture or scan your work and insert the image into the document in the correct order (your answers need to be labelled with the question number and appear in the correct order). Make sure all handwritten work can be easily read. The first page of the document must be a title page (see sample posted in D2L). Once you have finished your document, save the document as a PDF file. **Submit the PDF file** to the appropriate drop box on Desire2Learn. Name your document as follows:
CS1203_YourName_A2

1. Convert the value 7503 in octal to hexadecimal using binary and **show the intermediate binary value** you used in your conversion.

2. Convert the value 9C3B in hexadecimal to octal using binary and **show the intermediate binary value** you used in your conversion.

3. Convert the value 1011010111 in binary to:
   a. octal
   b. hexadecimal

4. Convert the following values to base 10:
   a. 1101101 (binary)
   b. A57B (hex)
   c. 3725 (octal)

5. Convert 75 base 10 to binary.

6. Convert 1297 base 10 to octal.

7. Convert 2029 base 10 to hexadecimal.

8. Convert 624 base 7 to base 10.

9. Convert 921 base 10 to base 14.

10. Perform the following arithmetic operations in hexadecimal (you must **show your work** to receive full marks):
    a. 27AC + 385
    b. 2035 – 14C

11. Perform the following arithmetic operations in octal (you must **show your work** to receive full marks):
    a. 574 + 116
    b. 513 – 257

12. Perform the following arithmetic operations in binary (you must **show your work** to receive full marks):
    a. 101101 + 11110
    b. 1001101 – 10111