Introduction to Computer Architecture

CISC 3310 Principles of Computer Architecture
Lab Activity

Data Representation - Exercises

Signed Numbers

- CB, Chapter 2, Exercise 24 - Using a "word" of 3 bits, list all the possible signed binary numbers and their decimal equivalents that are representable in:

  a) Signed magnitude

  b) One's complement

  c) Two's complement

- CB, Chapter 2, Exercise 25 – repeat the previous question using a "word" of 4 bits

- CB, Chapter 2, Exercise 26 - From the results of the previous two questions, generalize the range of values (in decimal) that can be represented in any given x number of bits the three number representations.

Questions?