HW #1

CSc 137, Harvey

**Total (12 pts)**

Problems 1.3, 1.4 , 1.5, 1.14 (3 pts each)

Reading assignment: Section 1.1 to 1.4 (all sub-sections).

Advance reading assignment: Section 2.1 through 2.4 (all subsections)

1.3. What is the 16-bit FP number representation of −5.375 in hex with 1-bit sign, 4-bit biased exponent, and 11-bit fraction, where bias offset = 7?

1.4. What is the real number equivalent to FP number 0x3400 with 1-bit sign, 4-bit biased exponent, 11-bit fraction, and bias offset = 7?

1.5. What is the real number equivalent to FP number 0x3400 with 1-bit sign, 4-bit biased exponent, 11-bit fraction, and bias offset = 8?

1.14 What is a Von Neumann architecture bottleneck?