**Glossary**

**Intro to Computer Systems**

**Exponent:** The value of which a number is calculated to the power of.

**Mantissa:** The numbers that follow a

**Binary:** A value with base 2. Utilized by computer systems as the smallest readable value to perform computational logic.

**Decimal:** A value with base 10. Most common “readable” base type.

**Integer:** A whole number. Not a fraction.

**Float:** Fractional number. Has “decimal point” but not necessarily decimal.

**Double** precision floating point number.

**Sign bit:** A bit that takes the place of a normal value, in place of representing positive (0) and negative (1). Integer value must be “signed” to represent negative values.

**Boolean algebra:** Based on the notation of true and false. Is represented by 1 (true) and 0 (false).

**AND operator:** Returns true when both operations are true. Written as x.y or x&&y.

**OR operator:** Returns true when either operation is true. Written as x+y or xVy

**NOT operator:** Returns the opposite value. Only takes one value. Written as -x or !x.

**XOR operator:** Similar to OR operator except it is true when only one input is true.

**Bit masking:** Used to set, or reset, binary values. Can also be used to retrieve a single bit, or to reset a length of bits (byte etc.).