Unit 1 Computer Science Vocab Review

Bit
A contraction of "Binary Digit"; the single unit of information in a computer, typically represented as a 0 or 1

byte
8 bits

overflow error
Error from attempting to represent a number that is too large

round-off error
error from attempting to represent a number that is too precise. The value is rounded.

analog data
Data with values that change continuously, or smoothly, over time. Some examples of analog data include music, colors of a painting, or position of a sprinter during a race.

digital data
Data that changes discreetly through a finite set of possible values

sampling
A process for creating a digital representation of analog data by measuring the analog data at regular intervals called samples.

lossless compression
A process for reducing the number of bits needed to represent something without losing any information. This process is reversible.

lossy compression
A process for reducing the number of bits needed to represent something in which some information is lost or thrown away. This process is not reversible.

creative commons
A collection of public copyright licenses that enable the free distribution of an otherwise copyrighted work, used when an author wants to give people the right to share, use, and build upon a work that they have created

data compression

A process for reducing the number of bits needed to represent a piece of information

decimal
a system for representing numbers using combinations of the digits 0 - 9

intellectual property
A work or invention that is the result of creativity, such as a piece of writing or a design, to which one has rights and for which one may apply for a patent, copyright, trademark, etc.

open access
online research output free of any and all restrictions on access and free of many restrictions on use, such as copyright or license restrictions

open source
programs that are made freely available and may be redistributed and modified