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CSC\_204\_LAB\_11

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1. To create a base 20 system, we would probably need to include four more letters of the alphabet to represent higher numeric values in a single character space. So, in addition to A, B, C, D, E, and F, we would add G, H, I and J to represent 16, 17, 18 and 19 respectively.
2. One’s complement (flipping all the bits) and two’s complement (flipping all the bits and then adding one) are similar in that each can be used to represent signed numbers, however one’s complement is not suitable for representing 0.
3. Logarithms and decibels are related in that decibels represent 10x the common logarithm (log10) of the signal power ratio. It is not possible for the argument of the common logarithm statement to be negative, as it is not possible to have a negative exponent.
4. MODEM stands for “modulator/demodulator” and is used to convert analog signals into digital signals and vice-a-versa. A typical ISBN modem will run at either 144 or 192 kpbs.
5. Octal numbers are base 8 numbers that I’ve only ever encountered when changing file permissions in a Linux system (chmod).