2.5 Problem Set

Aviel Resnick

AP Comp Sci A

Exercise 1.2:

1. 111000112 = 22710
2. 45B16 = 1115
3. The main difference is that Unicode consists of 16 binary digits, while Ascii consists of 8. This leads to the number of possible combinations being significantly larger for Unicode (65,536 vs 256)
4. (2^4)^3 = 4096 colors
5. 2\*\*16, or 65536, because the number of memory locations is equal to 2 (for either a one or a zero) \*\* the number of bits (16).