

Bits, Bytes, and Binary

1. Put the following binary numbers in order from least to greatest

00100011

00010010

10001011

01110100

01000001

00010111

11001000

00000000

2. What is the difference between a bit and a byte?
3. How many different decimal values can a byte store?
4. If I had 6 bits, what is the largest value?
5. If I have 6 bits, how many values can be stored?
6. Assume that I have a byte of storage (8 bits), can I store a value of 256?
7. If I add another bit, what happens to the binary values stored in the original byte?

8. There are consequences to using bits to represent data. What is an overflow error? Give an example.