Binary Representation

Today I learned that binary representation is the foundation of all digital information. Simply through chaining the two digits: 0 and 1, it can represent an infinite amount of information.

I learned that 0 and 1 can be directly correlated to two states of a switch that can physically be a transistor, which allowed us to build general-purpose computers at scale.

When converting decimal numbers to binary, I found out that the fastest way to do it by hand (or in my brain) is to convert the decimal number to a hexadecimal number first, and then convert the hexadecimal number to binary number, each digit in hexadecimal directly translating into 4 digits in binary.

References:

[Intro to Binary Numbers (youtube.com)](youtube.com)

[Binary number - Wikipedia](Wikipedia)