

4-digit Binary      Decimal

$$0000 = +0$$

$$0001 = +1$$

$$0010 = +2$$

$$0011 = +3$$

$$0100 = +4$$

$$0101 = +5$$

$$0110 = +6$$

$$0111 = +7$$

$$1000 = -0$$

$$1001 = -1$$

$$1010 = -2$$

$$1011 = -3$$

$$1100 = -4$$

$$1101 = -5$$

$$1110 = -6$$

$$1111 = -7$$

$$(0000)_2 = (1000)_2$$

n-digit

$$2^{n-1} - 1$$

$$\leftarrow \text{Max } 2^3 - 1$$

$$\leftarrow \text{Min } -(2^3 - 1)$$

$$-(2^{n-1} - 1)$$