

Lab Conversion

$$127_{10} = 1 \times 8^2 + 7 \times 8^1 + 7 \times 8^0 = 177_8 = \underline{00111111}_2$$
$$= 7 \times 16^1 + 15 \times 16^0 = 7F$$

$$\underline{010101}_2 = 25_8$$
$$= 15_{16}$$
$$= 1 \times 2^4 + 1 \times 2^3 + 1 \times 2^0 = 21_{10}$$

$$71_8 = 7 \times 8^1 + 1 \times 8^0 = 57_{10} = 3 \times 16^1 + 9 \times 16^0 = 39_{16}$$
$$= \underline{111001}_2$$

$$AB_{16} = 10 \times 16^1 + 11 \times 16^0 = 171_{10} = 2 \times 8^2 + 5 \times 8^1 + 3 \times 8^0 = 253_8$$
$$= \underline{10101011}_2$$