

$$1. \begin{array}{cccccccc} 128 & 64 & 32 & 16 & 8 & 4 & 2 & 1 \\ 0 & 0 & 1 & 1 & 1 & 1 & 1 & 1 \end{array}$$

$$\hookrightarrow \text{Decimal} = 32 + 16 + 8 + 4 + 2 + 1 = 63$$

$$\hookrightarrow \text{Hexadecimal} = \overbrace{0011}^3 \overbrace{1111}^F = 3F$$

$$2. 10011110$$

$$\hookrightarrow \text{Decimal} = 128 + 16 + 8 + 4 + 2 = 158$$

$$\hookrightarrow \text{Hexadecimal} = \overbrace{1001}^9 \overbrace{1110}^E = 9E$$

$$3. 00110011$$

$$\hookrightarrow D = 32 + 16 + 2 + 1 = 51$$

$$\hookrightarrow H = \overbrace{0011}^3 \overbrace{0011}^3 = 33$$

$$4. 00111001$$

$$32 + 16 + 8 + 1 = 57$$

$$\hookrightarrow D = \cancel{64} + \cancel{32} + \cancel{16} + \cancel{1} = 57$$

$$\hookrightarrow H = \overbrace{0011}^3 \overbrace{1001}^9 = 39$$

$$5. 11010111$$

$$\hookrightarrow D = 128 + 64 + 16 + 4 + 2 + 1 = 215$$

$$\hookrightarrow H = \overbrace{1101}^D \overbrace{0111}^7 = D7$$