

14. Convert 1011_2 to hexadecimal

B_{16}

$$1011_2 = 8 + 2 + 1 = 11 = B_{16}$$

15. Convert 11010101_2 to hexadecimal

$D5_{16}$

$$11010101_2 = 1 + 4 + 16 + 64 + 128 = 213$$

$$\begin{aligned} 1101 &= 13 \\ 0101 &= 5 \end{aligned} = D5_{16}$$

16. Convert 11011011_2 to hexadecimal

DB_{16}

$$\begin{aligned} 1101 &= 13 \\ 1011 &= 11 \end{aligned} = DB_{16}$$

17. Convert $3D_{16}$ to binary

00111101_2

$$\begin{aligned} 3 &= 0011 \\ D/13 &= 1101 \end{aligned} = 00111101$$

18. Convert $1A_{16}$ to binary

00011010_2

$$\begin{aligned} 1 &= 0001 \\ A/10 &= 1010 \end{aligned} = 00011010$$

19. Code the following word in hexadecimal then to binary. Be sure to watch video before completing this conversion

E	G	G
45	47	47

 ← HEXADECIMAL

$$45 = 0100 / 0101$$

$$47 = 0100 / 0111$$

BINARY → $01000101 \ 01000111 \ 01000111$