

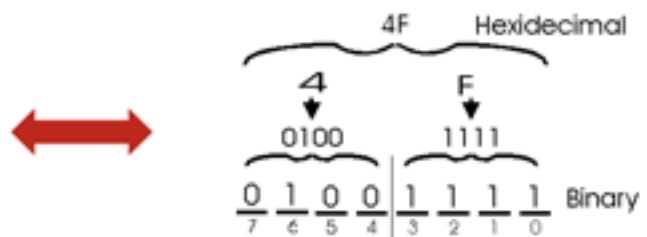
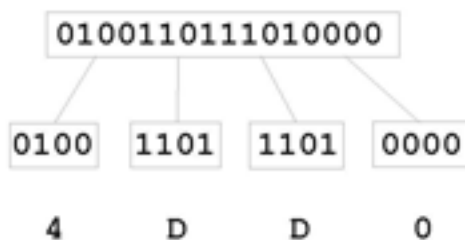
HEXADECIMAL	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
DECIMAL	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Convert the number **921** DECIMAL to HEXADECIMAL

A37E


$$\begin{array}{r}
 14 \times 16^0 = 14 \\
 7 \times 16^1 = 112 \\
 3 \times 16^2 = 768 \\
 10 \times 16^3 = 40960 \\
 \hline
 \text{Result} = 41854
 \end{array}$$

DIVISION	RESULT	REMAINDER (in HEX)
921 / 16	57	9
57 / 16	3	9
3 / 16	0	3
ANSWER		399



MSB	Binary Digit								LSB
2 <sup>8</sup>	2 <sup>7</sup>	2 <sup>6</sup>	2 <sup>5</sup>	2 <sup>4</sup>	2 <sup>3</sup>	2 <sup>2</sup>	2 <sup>1</sup>	2 <sup>0</sup>	
256	128	64	32	16	8	4	2	1	
Decimal Digit Value									
	256	128	64	32	16	8	4	2	1
Binary Digit Value									
	1	0	1	1	0	0	1	0	1

Find the Binary equivalent for Decimal 35

2	35	1	 LSD
2	<del>18</del> 17	<del>0</del> 1	
2	<del>8</del> 8	<del>10</del> 0	
2	4	0	
2	2	0	
2	1	1	
	0		
Quotient		MSD	

$$\begin{array}{r}
 128 \quad 64 \quad 32 \quad 16 \quad 8 \quad 4 \quad 2 \\
 1 \quad 0 \quad 0 \quad 1 \quad 1 \quad 0 \quad 1 \\
 \hline
 128 + 0 + 0 + 16 + 8 + 0 + 2 = 155
 \end{array}$$

MSD - most significant digit

LSD - least significant digit

Therefore, the binary equivalent for 35 is

**100101**