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Lab 1°

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1.) Convert 1101011 in base two to a decimal number

2^7 2^6 2^5 2^4 2^3 2^2 2^1 2^0

128, 64, 32, 16, 8, 4, 2, 1

⇒ 1 1 0 1 0 1 1

The 1's are the only values that matter

64 + 32 + 8 + 2 + 1

Deca = 107

2.) Convert 375 decimal to a binary number

375 − 256	
119	7
− 64	− 4
55	3
− 32	− 2
23	1
16	− 1
7	0

512, 256, 128, 64, 32, 16, 8, 4, 2, 1

1 0 1 1 1 0 1 1 1

Subtracting numbers that went Put me in the negative until I get to 0 and answer Will Start from the first 1

3.) convert ABCD in hexadecimal to a decimal number

Hexadecimal 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F (10–15)

16^0 16^1 16^2 16^3

1, 16, 256, 4096

4096 × ("10") = 40960

256 × ("11") = + 2816

16 × ("12") = + 192

1 × ("13") = + 13

43,981

4.) What is the decimal value of the ASCII Character A?

[redacted]

from the ASCII Table it would be displayed AS =>

Dec	Hx	Oct	HTML	Chr
65	41	101	A	A

So the decimal value would be 65

5.) What is the ASCII character whose decimal value is 121

from the ASCII Table it would be Displayed As =>

Dec	Hx	Oct	HTML	Chr
121	79	171	&#121	Y

The Character would have to be Y