$(344)_{10}$

10^2 100's 10^1 10's 10^0 1's

0
1
2
3
4
5
6
7
8
9
10

✓

$$\begin{array}{r} {}^{1}9 \\ +\,1 \\ \hline 10 \end{array}$$

0
1
2
3
4
10

$$\begin{array}{r} {}^{1}4 \\ +\,1 \\ \hline 10 \end{array}$$

$$\begin{matrix} 5^2 & 5^1 & 5^0 \\ 25's & 5's & 1's \end{matrix}$$

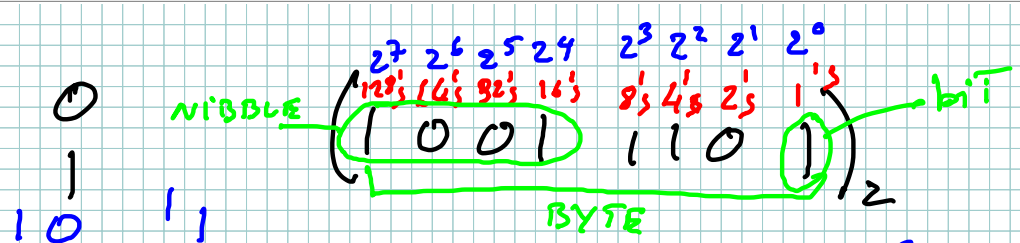
$$(3\,4\,4)_5$$

$3 \times 5^2 = 3 \times 25 = 75$

$4 \times 5^1 = 4 \times 5 = 20$

$4 \times 5^0 = 4 \times 1 = 4$

$$(99)_{10}$$



$$(1001\ 1101)_2$$

$$\begin{array}{r} 1\ 1 \\ +1\ 1 \\ \hline 1\ 0 \end{array}$$

$$\begin{array}{r} {}^{0} \\ +0 \\ \hline 0 \end{array}$$

$$\begin{array}{r} {}^{0} \\ +1 \\ \hline 1 \end{array}$$

$$1 \times 2^7 = 1 \times 128 = 128$$
$$0 \times 2^6 = - - - - = 0$$
$$0 \times 2^5 = - - - - = 0$$
$$1 \times 2^4 = 1 \times 16 = 16$$
$$1 \times 2^3 = 1 \times 8 = 8$$
$$1 \times 2^2 = 1 \times 4 = 4$$
$$0 \times 2^1 = - - - - = 0$$
$$1 \times 2^0 = 1 \times 1 = 1$$

$$(157)_{10}$$

$(157)_{10} \rightarrow (1001\ 1101)_2$

$(9\ D)_{16}$

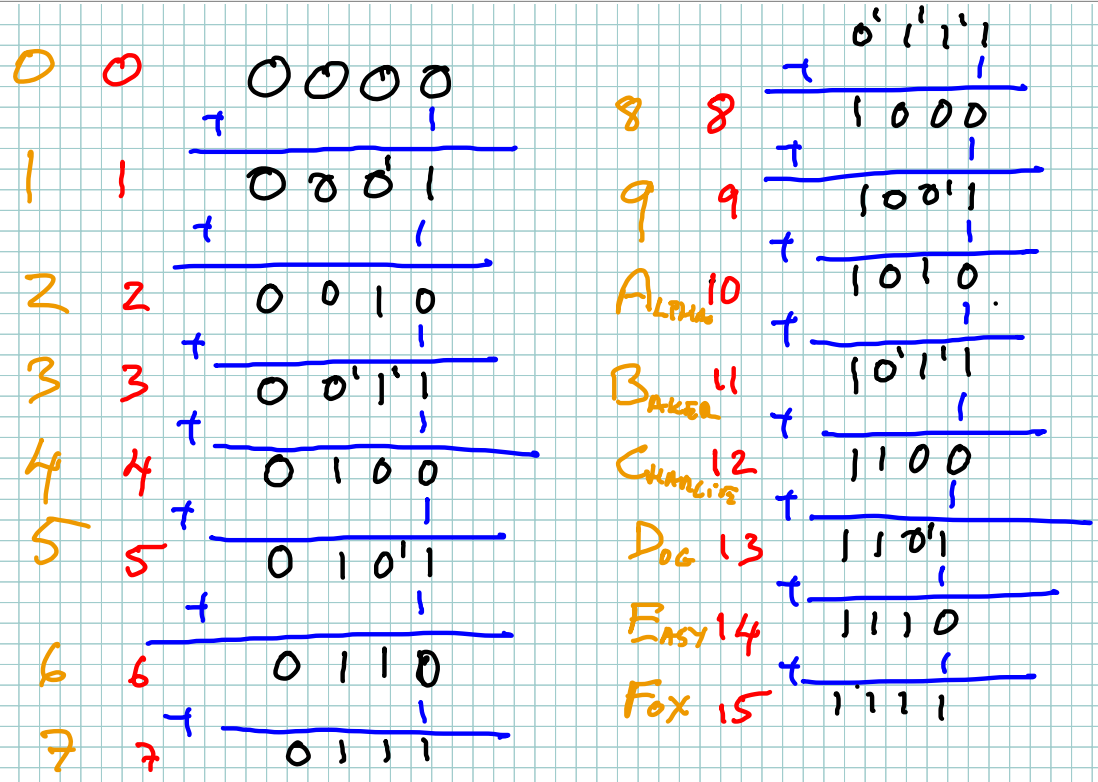
128	64	32	16	8	4	2	1
1	0	0	1	1	1	0	1

157 ÷ 128 = 1 remainder 29

29 ÷ 16 = 1 remainder 13

13 ÷ 8 = 1 remainder 5

5 ÷ 4 = 1 remainder 1


0 0 0000
1 1 0001
2 2 0010
3 3 0011
4 4 0100
5 5 0101
6 6 0110
7 7 0111
8 8 1000
9 9 1001
A ALPHA 10 1010
B BAKER 11 1011
C CHARLIE 12 1100
D DOG 13 1101
E EASY 14 1110
F FOX 15 1111

$(9D)_{16} = (1001\ \ 1101)_2$

$9 \times 16^1 = 9 \times 16 = 144$

$D \times 16^0 = 13 \times 1 = 13$

$(157)_{10}$