

Díjotyázóvállalkozás

Base 128 64 32 16 8 4 2 1

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

0000000001:1

Base	128	64	32	16	8	4	2	1
Base	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
	0	0	0	0	0	0	0	1

1

0000111:1+2=3

Base	128	64	32	16	8	4	2	1
Base	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
	0	0	0	0	0	0	0	1
	0	0	0	0	0	0	1	1

1

1+2 = 3

$$0+0=0 \quad 0+1=1 \\ 0+2=2 \quad 0+4=4$$

Base	128	64	32	16	8	4	2	1	
Base	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	
	0	0	0	0	0	0	0	1	1
	0	0	0	0	0	0	1	1	$1+2 = 3$
	0	0	0	0	0	1	1	1	$1+2+4 = 7$

$$0+0+0=0 \quad 1+1+1=3$$
$$1+2+4+8=15$$

Base	128	64	32	16	8	4	2	1	
Base	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	
	0	0	0	0	0	0	0	1	1
	0	0	0	0	0	0	1	1	$1+2 = 3$
	0	0	0	0	0	1	1	1	$1+2+4 = 7$
	0	0	0	0	1	1	1	1	$1+2+4+8 = 15$

Base	128	64	32	16	8	4	2	1	
Base	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	
	0	0	0	0	0	0	0	1	1
	0	0	0	0	0	0	1	1	$1+2 = 3$
	0	0	0	0	0	1	1	1	$1+2+4 = 7$
	0	0	0	0	1	1	1	1	$1+2+4+8 = 15$
	0	0	0	1	1	1	1	1	$1+2+4+8+16 = 31$

1 + 2 + 4 + 8 + 16 + 32 = 63
1 + 1 + 1 + 1 + 1 + 1 + 1 = 7
1 + 1 + 1 + 1 + 1 + 1 + 1 = 7

Base	128	64	32	16	8	4	2	1	
Base	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	
	0	0	0	0	0	0	0	1	1
	0	0	0	0	0	0	1	1	$1+2 = 3$
	0	0	0	0	0	1	1	1	$1+2+4 = 7$
	0	0	0	0	1	1	1	1	$1+2+4+8 = 15$
	0	0	0	1	1	1	1	1	$1+2+4+8+16 = 31$
	0	0	1	1	1	1	1	1	$1+2+4+8+16+32 = 63$

$$1 + 2 + 4 + 8 + 16 + 32 + 64 = 127$$

Base	128	64	32	16	8	4	2	1	
Base	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	
	0	0	0	0	0	0	0	1	1
	0	0	0	0	0	0	1	1	$1+2 = 3$
	0	0	0	0	0	1	1	1	$1+2+4 = 7$
	0	0	0	0	1	1	1	1	$1+2+4+8 = 15$
	0	0	0	1	1	1	1	1	$1+2+4+8+16 = 31$
	0	0	1	1	1	1	1	1	$1+2+4+8+16+32 = 63$
	0	1	1	1	1	1	1	1	$1+2+4+8+16+32+64 = 127$

$$\vdots 1 + 2 + 4 + 8 + 16 + 32 + 64 + 128 = 255 \vdots 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1$$

Binary numbers

Base	128	64	32	16	8	4	2	1	
Base	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0	
	0	0	0	0	0	0	0	1	1
	0	0	0	0	0	0	1	1	$1+2 = 3$
	0	0	0	0	0	1	1	1	$1+2+4 = 7$
	0	0	0	0	1	1	1	1	$1+2+4+8 = 15$
	0	0	0	1	1	1	1	1	$1+2+4+8+16 = 31$
	0	0	1	1	1	1	1	1	$1+2+4+8+16+32 = 63$
	0	1	1	1	1	1	1	1	$1+2+4+8+16+32+64 = 127$
	1	1	1	1	1	1	1	1	$1+2+4+8+16+32+64+128 = 255$

Binary numbers

What are the possible 3-digit binary numbers?