

Data Type (1A)

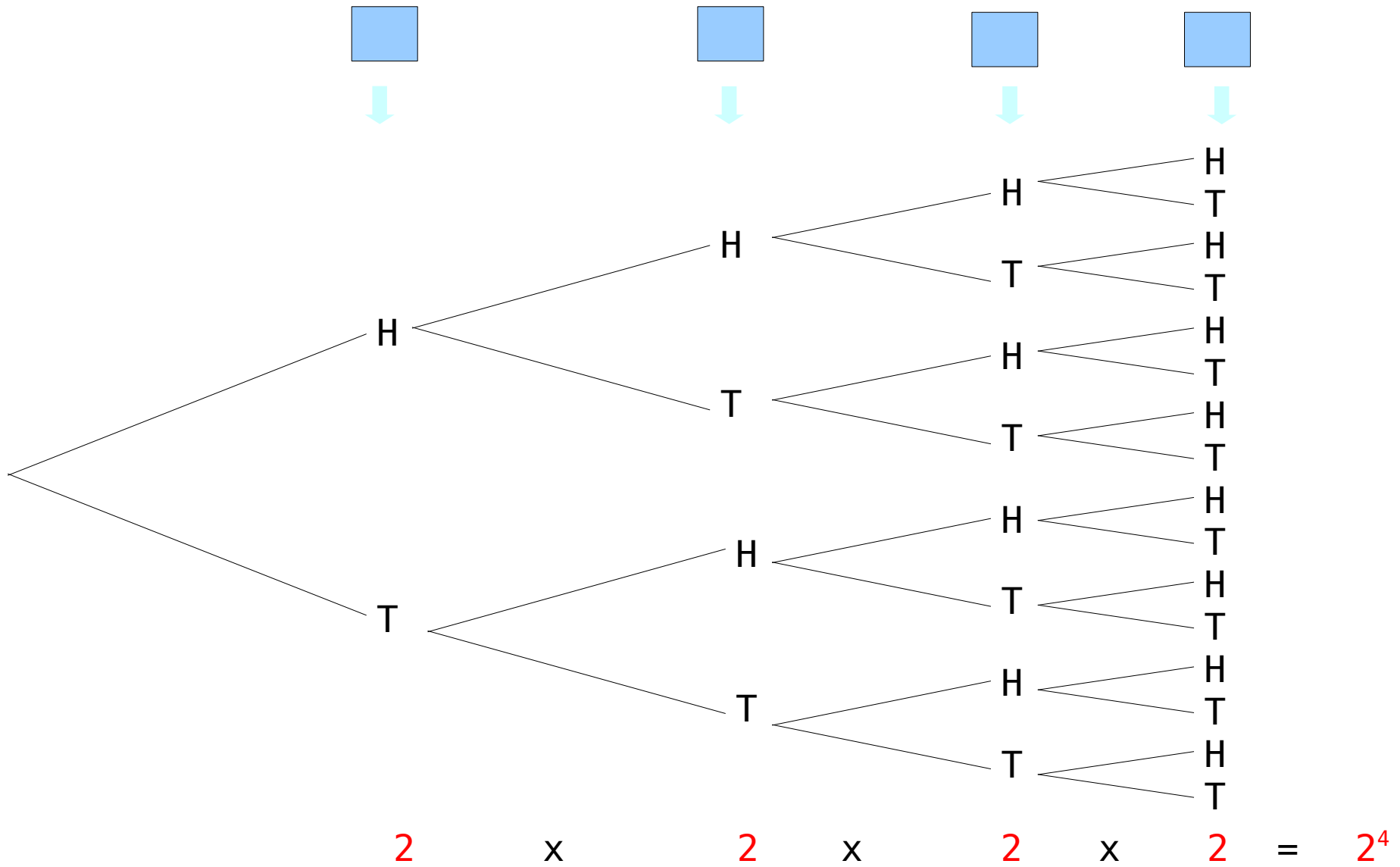
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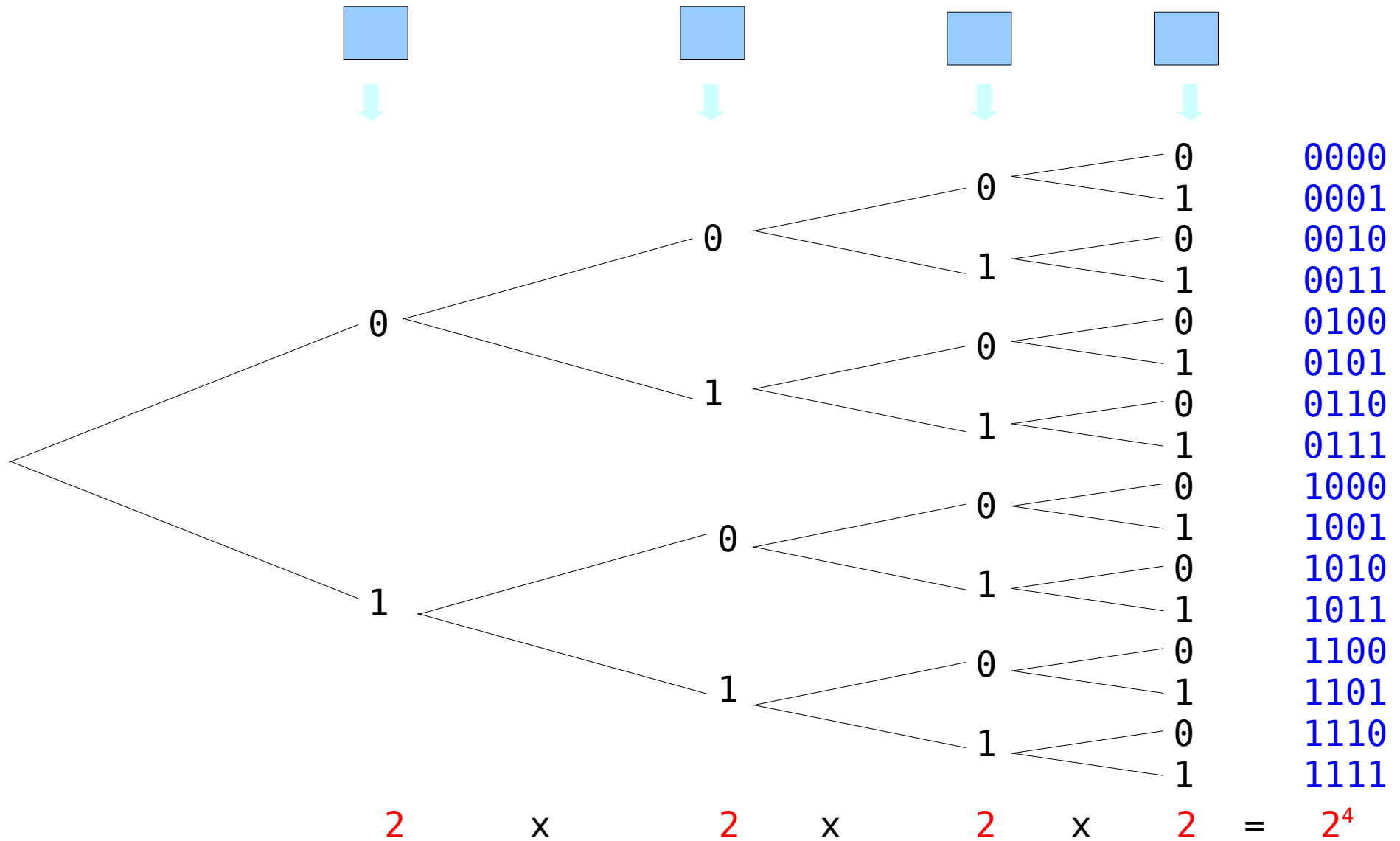
Please send corrections (or suggestions) to youngwlim@hotmail.com.

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Coin Toss



Coin Toss and Binary Number

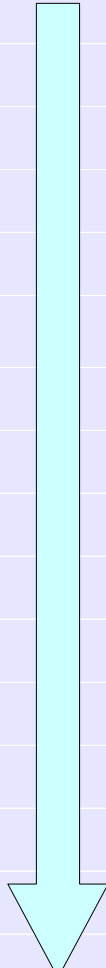


Hexadecimal and Octal Numbers

				DEC	HEX	OCT
0	0	0	0	0	0	0
0	0	0	1	1	1	1
0	0	1	0	2	2	2
0	0	1	1	3	3	3
0	1	0	0	4	4	4
0	1	0	1	5	5	5
0	1	1	0	6	6	6
0	1	1	1	7	7	7
1	0	0	0	8	8	10
1	0	0	1	9	9	11
1	0	1	0	10	A	12
1	0	1	1	11	B	13
1	1	0	0	12	C	14
1	1	0	1	13	D	15
1	1	1	0	14	E	16
1	1	1	1	15	F	17

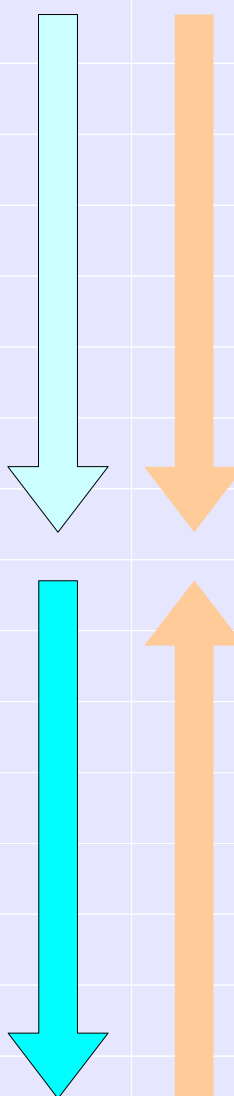
Unsigned Binary Number

0	0	0	0		0
0	0	0	1		1
0	0	1	0		2
0	0	1	1		3
0	1	0	0		4
0	1	0	1		5
0	1	1	0		6
0	1	1	1		7
1	0	0	0		8
1	0	0	1		9
1	0	1	0		10
1	0	1	1		11
1	1	0	0		12
1	1	0	1		13
1	1	1	0		14
1	1	1	1		15



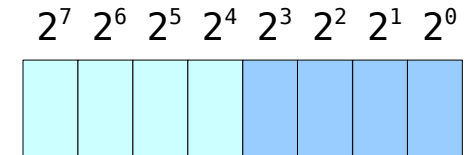
Signed Binary Number

0	0	0	0	0
0	0	0	1	+1
0	0	1	0	+2
0	0	1	1	+3
0	1	0	0	+4
0	1	0	1	+5
0	1	1	0	+6
0	1	1	1	+7
1	0	0	0	-8
1	0	0	1	-7
1	0	1	0	-6
1	0	1	1	-5
1	1	0	0	-4
1	1	0	1	-3
1	1	1	0	-2
1	1	1	1	-1

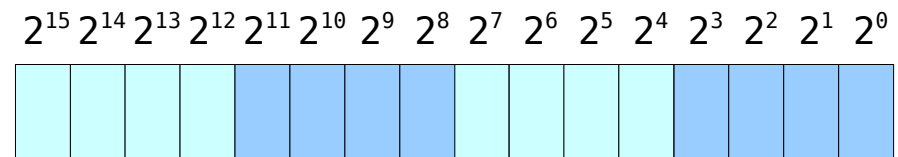


Unsigned Integer Numbers in 1, 2, 4 Bytes

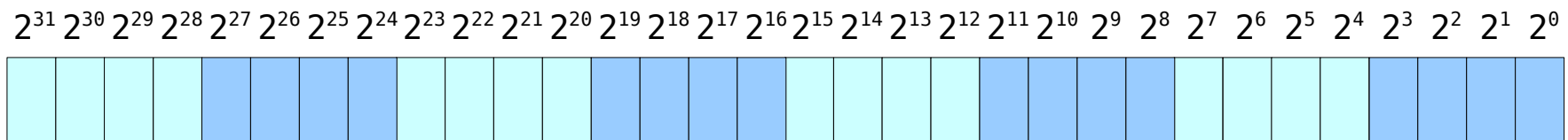
1 Byte : unsigned char



2 Byte: unsigned short



4 Byte: unsigned int
unsigned long

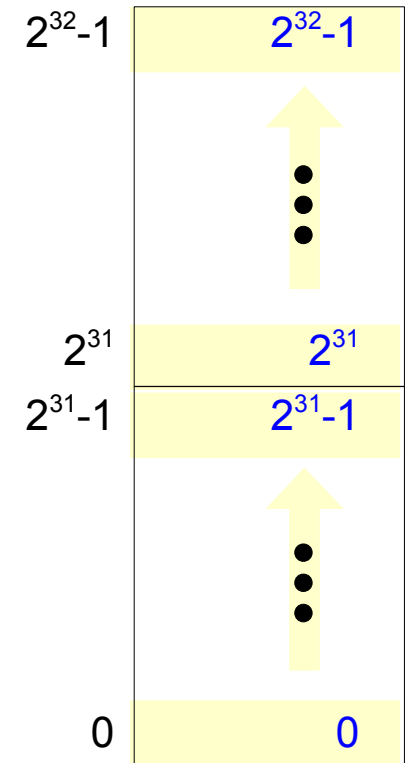
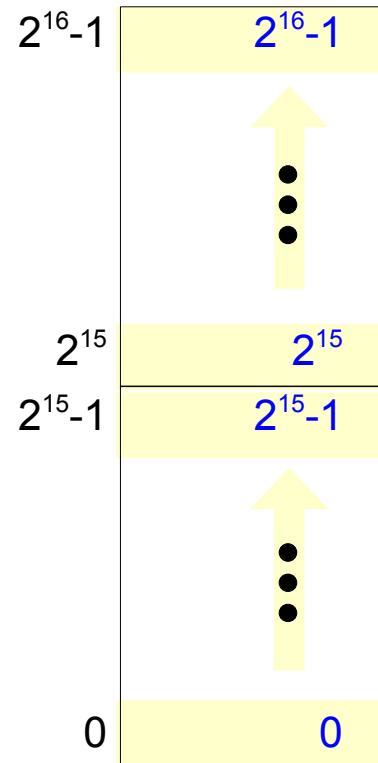
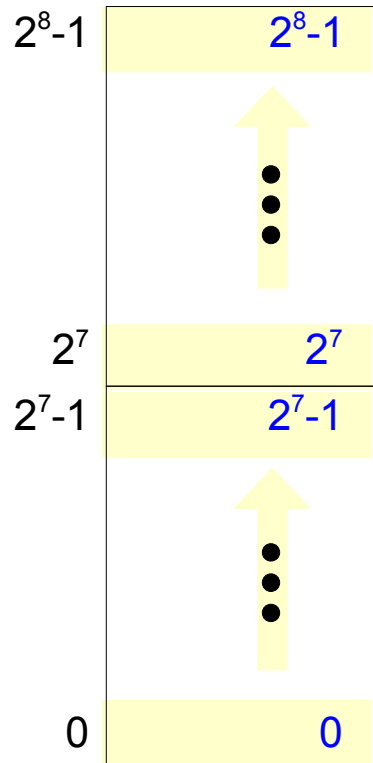


Unsigned Integer Ranges

2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
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2^{15}	2^{14}	2^{13}	2^{12}	2^{11}	2^{10}	2^9	2^8
2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0

2^{31}	2^{30}	2^{29}	2^{28}	2^{27}	2^{26}	2^{25}	2^{24}
2^{23}	2^{22}	2^{21}	2^{20}	2^{19}	2^{18}	2^{17}	2^{16}
2^{15}	2^{14}	2^{13}	2^{12}	2^{11}	2^{10}	2^9	2^8
2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0

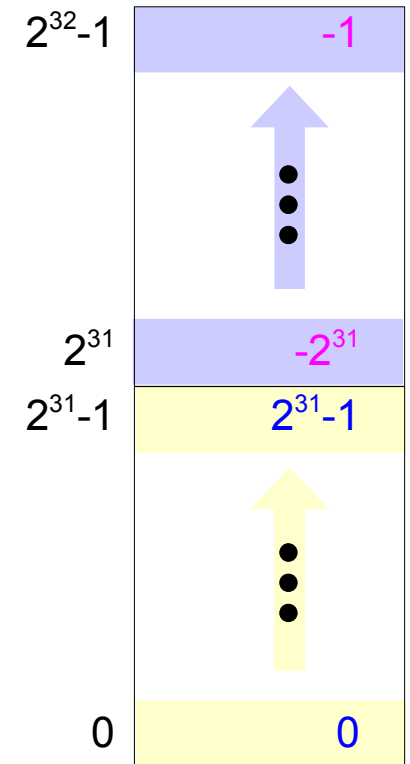
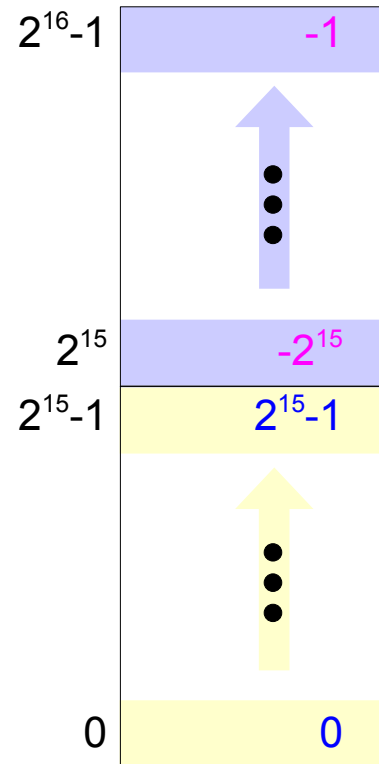
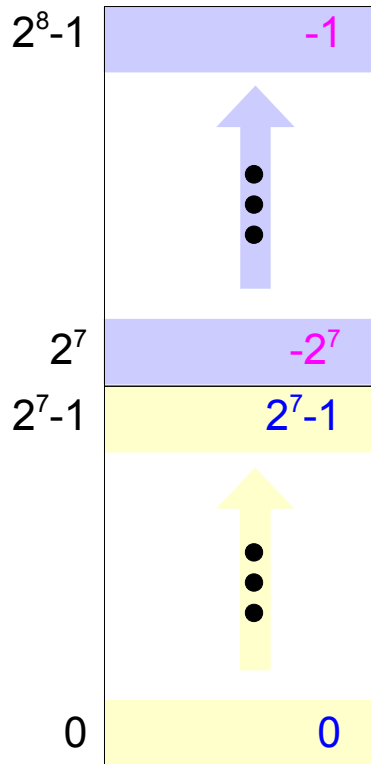


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2^{15}	2^{14}	2^{13}	2^{12}	2^{11}	2^{10}	2^9	2^8
2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0



References

- [1] Essential C, Nick Parlante
- [2] Efficient C Programming, Mark A. Weiss
- [3] C A Reference Manual, Samuel P. Harbison & Guy L. Steele Jr.
- [4] C Language Express, I. K. Chun