Example: Converting Binary to Decimal

10101000 → 168

Power of 2		128	64	32	16	8	4	2	1
Bit		1	0	1	0	1	0	0	0
Cumulative Amount		128	0	32	0	8	0	0	0

Now, give it a try by converting the binary number 01010110 to decimal following the same steps as above.

Power of 2		128	64	32	16	8	4	2	1
Bit		0	1	0	1	0	1	1	0
Cumulative Amount									

Example: Converting Decimal to Binary

155 -> 10011011

Power of 2		128	64	32	16	8	4	2	1
Bit									
Cumulative Amount		1	0	0	1	1	0	1	1

128 + 16 + 8 + 2 + 1 = 10011011

Now, give it a try by converting the decimal number 118 to binary following the same steps as above.

Power of 2		128	64	32	16	8	4	2	1
Bit									
Cumulative Amount									

Example: Snake Method - Decimal to Binary

215 -> ?

Example: Binary to Hexadecimal

10011011 -> 9B

1001 | 1011

0000 – 0	1000 – 8
0001 – 1	1001 – 9
0010 – 2	1010 – A (10)
0011 – 3	1011 – B (11)
0100 – 4	1100 – C (12)
0101 – 5	1101 – D (13)
0110 – 6	1110 – E (14)
0111 – 7	1111 - F (15)

Example: Basic Hexadecimal Math

0xAABB0 + 4 -> AABB4

0xAABB4 + 8 -> AABBC

0xAABBC + 4 -> AABC0