

Digital Data Formats

Integers: 1 byte digits

00000000	=	0
00000001	=	1
00000010	=	2
00000011	=	3
00000100	=	4
00000101	=	5
00000110	=	6
00000111	=	7
00001000	=	8
⋮		
11111110	=	254
11111111	=	255

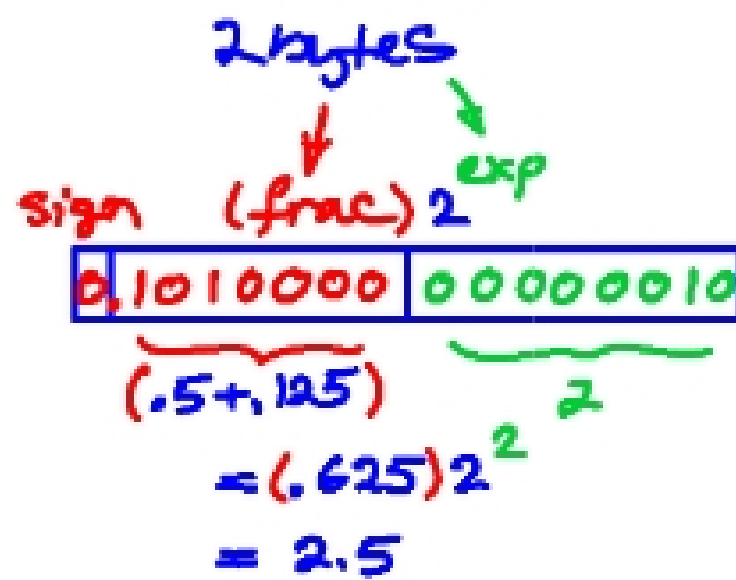
256 total members
0 → 255

Signed Integers:

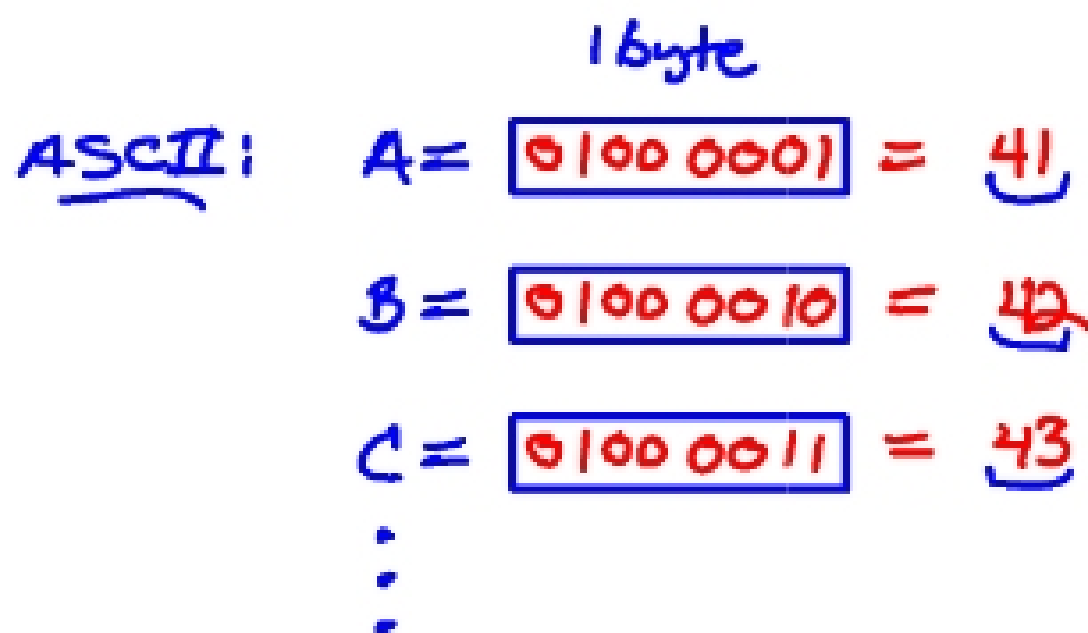
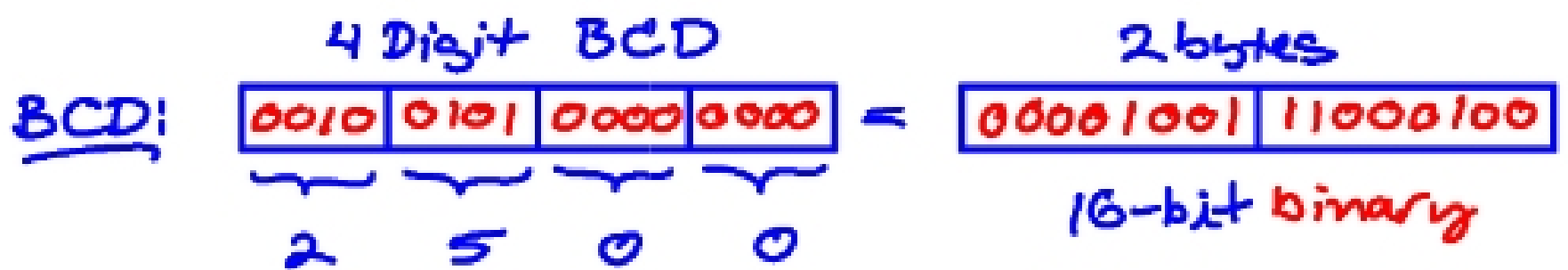
00000110	=	+6	
↓ sign			
+ 11110110	=	+(-6) (2's C)	
Sum: 00000000		0	
↑ overflow			

0	0	1	1
+0	+1	+0	+1
0	1	1	10

Floating Point:

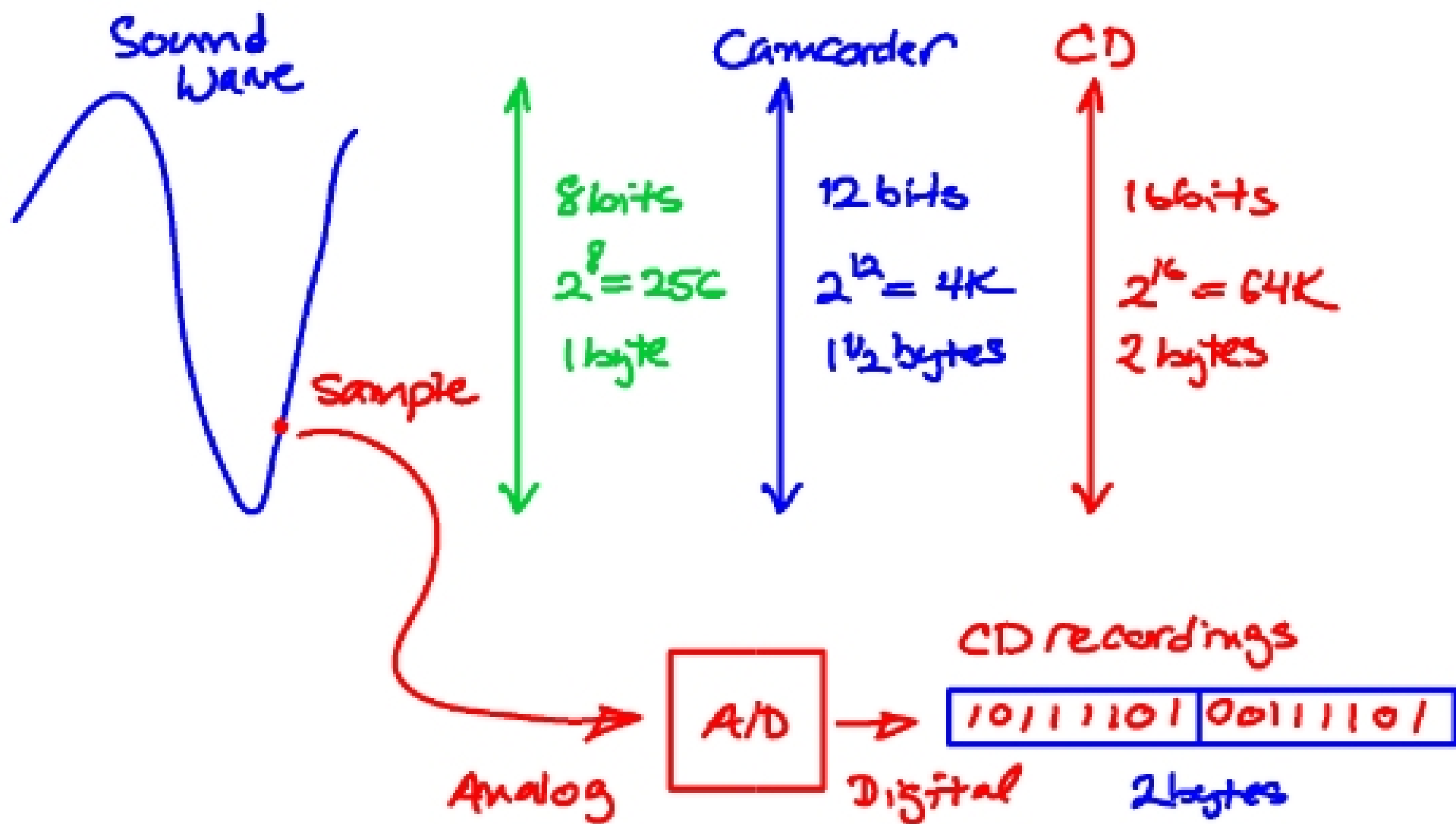


- . = 1.
- .1 = .5
- .01 = .25
- .001 = .125
- ⋮



"ECE 2500" = $\underbrace{45}_{E} \underbrace{43}_{C} \underbrace{45}_{E} \underbrace{20}_{\varnothing} \underbrace{32}_{2} \underbrace{35}_{5} \underbrace{30}_{0} \underbrace{30}_{0} = 8 \text{ bytes}$

MUSIC:



Color Codes

