

Hw2 cohea

1.

$$0100\ 1101 = 1 + 4 + 8 + 64 = 77 = M$$

$$0100\ 1111 = 1 + 2 + 4 + 8 + 64 = 79 = O$$

$$0101\ 0110 = 2 + 4 + 16 + 64 = 86 = V$$

$$0100\ 1001 = 1 + 8 + 64 = 73 = I$$

$$0100\ 0101 = 1 + 4 + 64 = 69 = E$$

$$0101\ 0011 = 1 + 2 + 16 + 64 = 83 = S$$

MOVIES

2.

$$26 = 16 + 8 + 2 = 0001\ 1010$$

$$172 = 128 + 32 + 8 + 4 = 1010\ 1100$$

$$67 = 64 + 1 = 0100\ 0001$$

$$32 = 32 = 0010\ 0000$$

$$7 = 4 + 2 + 1 = 0000\ 0111$$

$$104 = 64 + 32 + 8 = 0110\ 1000$$

3.

$$B = 66 = 64 + 2 = 0100\ 0010$$

$$e = 101 = 64 + 32 + 8 + 1 = 0110\ 0101$$

$$= 32 = 32 = 0010\ 0000$$

$$Y = 89 = 64 + 16 + 8 + 1 = 0101\ 1001$$

$$o = 111 = 64 + 32 + 8 + 4 + 2 + 1 = 0110\ 1111$$

$$u = 117 = 64 + 32 + 16 + 4 + 1 = 0111\ 0101$$

$$r = 114 = 64 + 32 + 16 + 2 = 0111\ 0010$$

$$s = 115 = 64 + 32 + 16 + 2 + 1 = 0111\ 0011$$

$$e = 101 = 64 + 32 + 8 + 1 = 0110\ 0101$$

$$l = 108 = 64 + 32 + 8 + 4 = 0110\ 1100$$

$$f = 102 = 64 + 32 + 8 + 2 = 0110\ 0110$$

$$! = 33 = 32 + 1 = 0010\ 0001$$

4.

binary_number	decimal_number	position	placeholder	bit	print
0100 1101	0	7	128	0	
0100 1101	64	6	64	1	
0100 1101	64	5	32	0	
0100 1101	64	4	16	0	

0100 1101	72	3	8	1	
0100 1101	76	2	4	1	
0100 1101		1	2	0	
0100 1101	77	0	1	1	
0100 1101	77	0/-1 end	1	1	77