

7. Convert  $189_{10}$  to binary. Then convert binary value to hexadecimal

$$\begin{array}{lcl}
 9_{10} \rightarrow 128 + 32 + 16 + 8 + 4 + 1 & \downarrow & 10111101_2 \\
 & & \boxed{10111101_2} \\
 128 - 64 - 32 - 16 - 8 - 4 - 1 & & 10111101_2 \\
 & & 1011 = B_{11} \\
 & & 1101 = D_{13} \\
 & & \boxed{BD_{16}}
 \end{array}$$

8. Code the following in hexadecimal and then in binary in ASCII. Be sure to review the video on conversions before working on this problem

M O N D A Y (no spaces)  
 $\boxed{4D \ 4F \ 4E \ 44 \ 41 \ 59} \leftarrow \text{HEXADECIMAL}$

$$4D = 4/13 = 0100/1101$$

$$4F = 4/15 = 0100/1111$$

$$4E = 4/14 = 0100/1110$$

$$44 = 4/4 = 0100/0100$$

$$41 = 4/1 = 0100/0001$$

$$59 = 5/9 = 0101/1001$$

BINARY  $\rightarrow \boxed{01001101 \ 01001111 \ 01001110 \ 01000100 \ 01000001 \ 01011001}$