

**Exercise #4**  
**Hexadecimal and Octal**

1. Complete the following table by converting the values. Do not break the values into eight bits

Binary	Octal	Decimal	Hexadecimal
001110110001 <sub>2</sub>	001 110 110 001=1661 <sub>8</sub>	512+384+48+1=945 <sub>10</sub>	59R1 3R11 0R3 3111 <sub>16</sub>
110111000010 <sub>2</sub>	110 111 000 010=6702 <sub>8</sub>	3072+448+0+2=3522 <sub>10</sub>	220R2 13R12 0R13 <sub>16</sub>
011 001 010 001 <sub>2</sub>	6234 <sub>8</sub>	3072+128+24+4=3228 <sub>10</sub>	201R12 12R9 0R12 <sub>16</sub>
001001000001 <sub>2</sub>	1102 <sub>8</sub>	512+64+0+2=578 <sub>10</sub>	36R2 2R4 0R2 <sub>16</sub>
011111111111 <sub>2</sub>	255R7 31R7 3R7 0R3 3777 <sub>8</sub>	2047 <sub>10</sub>	127R15 7R15 0R7 <sub>16</sub>
101111001000 <sub>2</sub>	380R0 47R4 5R7 0R5 5740 <sub>8</sub>	3040 <sub>10</sub>	190R0 11R14 0R11 <sub>16</sub>
111110101101 <sub>2</sub>	111 110 101 101= 7655 <sub>8</sub>	3584+384+40+5=4013 <sub>10</sub>	FAD <sub>16</sub>
101000011 <sub>2</sub>	40R3 5R0 0R5 503 <sub>8</sub>	256+64+3=323 <sub>10</sub>	143 <sub>16</sub>