CSIS 330 – Lab 4: Binary Conversions

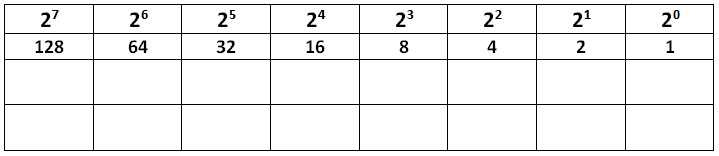
**Background:**

After watching the video explaining how to convert between binary, decimal, and hexadecimal, complete this assignment.

**Assignment Instructions:**

Complete each question below in the Word Answer Template provided.

Tables showing number positions are included only for your reference.

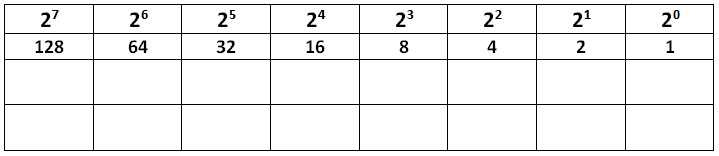


**Question 1 (1 point)**

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|  | Convert the following number into an eight bit binary number:  Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 192 |  |  |  |
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**Question 2 (1 point)**

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|  | Convert the following Binary number into a decimal number:  Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11010001 |  |  |  |
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**Question 3 (1 point)**

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|  | Convert the following Binary number into a decimal number:  Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10000100 |  |  |  |
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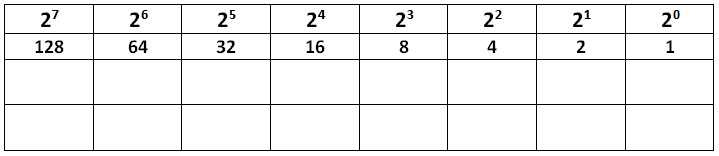
**Question 4 (1 point)**

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|  | Convert the following number into an eight bit binary number:  Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 168 |  |  |  |
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**Question 5 (4 points)**

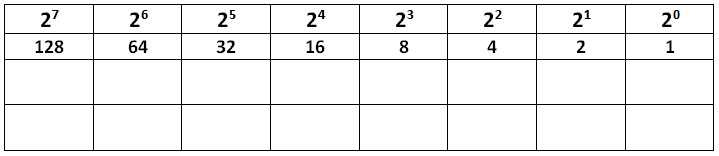
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|  | Mark each of the following Binary numbers as even or odd. (1/2 point each)  Answer |  |  |  |
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* **Question 6 (5 points)**



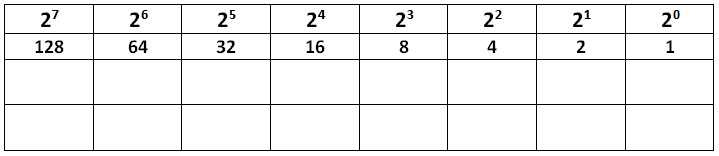
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|  | In your head, convert these numbers from binary to decimal numbers.  You should practice these until you can do them without any aids.  Then you will know binary.   ;-)  (1/2 point each)  a. Answer: \_\_\_\_\_\_\_\_ 10000000  b. Answer: \_\_\_\_\_\_\_\_ 01000000  c. Answer: \_\_\_\_\_\_\_\_ 00100000  d. Answer: \_\_\_\_\_\_\_\_ 00010000  e. Answer: \_\_\_\_\_\_\_\_ 00001000  f. Answer: \_\_\_\_\_\_\_\_ 00000100  g. Answer: \_\_\_\_\_\_\_\_ 00000010  h. Answer: \_\_\_\_\_\_\_\_ 11111111   i. Answer: \_\_\_\_\_\_\_\_ 01000001  j. Answer: \_\_\_\_\_\_\_\_ 11111110 |  |  |  |
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* **Question 7 (4 points)**



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|  | Convert the following Binary numbers into a Hex number: (1/2 point each)  a. Answer: \_\_\_\_\_\_\_\_ 11001010  b. Answer: \_\_\_\_\_\_\_\_ 11110101  c. Answer: \_\_\_\_\_\_\_\_ 10000011  d. Answer: \_\_\_\_\_\_\_\_ 11101011  e. Answer: \_\_\_\_\_\_\_\_ 11011000  f. Answer: \_\_\_\_\_\_\_\_ 00011011  g. Answer: \_\_\_\_\_\_\_\_ 00111101  h. Answer: \_\_\_\_\_\_\_\_ 01110110 |  |  |  |
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* **Question 8 (3 points)**



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|  | Convert the following Hex numbers into a Binary number: (1/2 point each)  a. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 84   b. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ D2  c. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 43   d. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B3   e. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ FF   f. Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ EE |  |  |  |
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* **Question 9 (1 point)**

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|  | Convert the following Binary number into a decimal number:  Answer: \_\_\_\_\_\_\_\_ 10101010 |  |  |  |
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* **Question 10 (1 point)**

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|  | Convert the following number into an eight bit binary number:  Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 204 |  |  |  |
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* **Question 11 (1 point)**

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|  | Convert the following Binary number into a decimal number:  Answer: \_\_\_\_\_\_\_\_ 00000011 |  |  |  |
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* **Question 12 (1 point)**

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|  | Convert the following number into an eight bit binary number:  Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 52 | | |  |  |  |
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* **Question 13 (1 point)**

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|  | Convert the following Binary number into a decimal number:  Answer: \_\_\_\_\_\_\_\_ 10111000 |  |  |  |
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**Deliverables:**

Save your Answer Template using the convention of [your first initial] + [your last name] + “\_Lab4”.

For example: Joe Smith will save his file template as JSmith\_Lab4.doc .

Submit your **Word Template** to Blackboard by attaching it to the appropriate assignment link.