Show all binary answers in groups of 4 bits with a space between. For example: 0101 1010 0001 1111

Show the binary representation of \(-408_{10}\) in the following representation schemes (assume 16-bit words):

a) sign magnitude

b) one’s-complement

c) two’s complement

Convert \(319_{10}\) into (assume 16-bit words):

a) binary

b) octal

c) hexadecimal

Fill in the Condition Code bits for the following addition instructions (8-bit two’s-complement numbers):

\[
\begin{array}{c}
1011 \ 0110 \\
+ \ 1100 \ 1011 \\
\hline
\end{array} \quad \begin{array}{c}
0100 \ 1010 \\
+ \ 0011 \ 0110 \\
\hline
\end{array}
\]

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<th>N</th>
<th>Z</th>
<th>C</th>
<th>V</th>
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Powers of 2

\[ 64G = 2^{18} \]

\[ 2^{18} = \text{______} \] (in terms of K, M, G, etc.)

In a Little-Endian architecture, show how the bytes are laid out in memory for the following statement (write the hexadecimal values of the bytes in the appropriate memory locations):

```c
int errogate = 0xABCD5678;
```

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<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
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What is the hex value of the most significant byte? ________

Use the letters in the box to the right to answer the following questions:

In gdb, to examine the memory values of 15 words starting at array, use the command ______

In gdb, to print the names and values of all the general registers, use the command ______

What does BSS stand for? ____________________________________________________

Correctly order the typical sequential computer's instruction cycle operations as discussed in class.

A) Execute
B) Instruction Decode
C) Store Result
D) Operand Fetch
E) Instruction Fetch

Regarding Programming Assignments, CSE 30 this quarter does not allow for (mark all that are correct):

____ Searching man pages for the meaning of functions and their arguments
____ Searching on the Internet for Programming Assignment or class titles
____ Individual Work
____ Looking at someone else's code who took the class in the past
____ Looking at someone else's code who is currently taking the class