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course:	csci 10
assignment:	lab 2
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1.   What is the smallest unit of data on a binary computer?

An individual bit, which stores a value of 0 or 1.

2.   In computing, what is meant by a word ?

A word is the natural unit of data for a processor, registers are usually designed to store one word, which is the largest piece of data that can be transferred to and from the working memory in a single operation.

3.   What data types (names and sizes) do ARM Cortex-M4 processors support?

The Cortex-M4 processor supports data types of 32-bit words, 16-bit halfwords, and 8-bit bytes.

4.   Convert the following base-10/decimal value to base-16/hexadecimal representation :   268435456

0x10000000

5.   Convert the following base-10/decimal value to base-16/hexadecimal representation :   4096

0x1000

6.   Convert the following base-10/decimal value to base-16/hexadecimal representation :   240

0xF0

7.   Convert the following base-10/decimal value to base-16/hexadecimal representation :   16

0x10

8.   Convert the following base-16/hexadecimal value to base-10/decimal representation :   0x1111

4369

9.   Convert the following base-16/hexadecimal value to base-10/decimal representation :   0xFFFF

65535

10. Convert the following base-16/hexadecimal value to base-2/binary representation :   0xFFFF

0b1111_1111_1111_1111