Chapter 2 – Additional Problems with Solution – Helpful for the Homework, and Chapter Quiz on Chapter 2

Problem 1:

"John is a Biology major but not a Math major".

Represent the above statement in symbolic form using the below as necessary (not all may be required):

m = "John is a Biology major"

c = "John is a Math major"

and the symbol ~ (for logical not), "and" (to represent logical and), and "or" (to represent logical or).

Solution: m and ~c

Problem 2:

Convert the following binary number into hexadecimal notation. Spaces have been used to separate out groups of four binary digits (bits) but are not important to the result.

(in your answer, use capital letters rather than lowercase, and don't use any spaces)

1011 0101 1110 0111 0011 0100 1100 1101

Solution:

B5E734CD

Problem 3:

What is the binary representation of the hexadecimal value: 4EAB?

Solution:

0100 1110 1010 1011