LAB Assignment 3

Part 1: Trace the vecprod.c program and answer the following questions:

a. Show the contents of the stack (in hex) just prior to instructions: 11, 28, 33, 12 (first time the instruction is encountered)
b. Which instruction placed the value 0011 on the stack?
c. What is the meaning of this value?
d. Which instruction removes it from the stack?
e. Which instruction reads the values of vec1?
f. Which instruction reads the values of vec2?
g. What is the value (in decimal) of AX just prior to instruction 12?
h. Which instruction accumulates the vector product?
i. At which memory address (hex) is the vector product accumulated?

Part 2:

a. Modify the program by defining vec1: .WORD 1023, 1024, 1025, 2047, 2048
b. Show the contents (in hex) of the 10 bytes occupied by this vector.

   Hint: while tracing, display the memory of addresses vec1+0 through vec+9
c. Why is 1023 shown as ff03 and not 03ff? (1023 is 03ff in hex)