Exercise 2

1. Declare four symbolic constants that represent integer 25 in decimal, binary, octal, and hexadecimal formats.

2. Given the number 456789ABh, list out its byte values in little-endian order.

3. Given the number 456789ABh, list out its byte values in big-endian order.

4. Define an array of 120 uninitialized unsigned doubleword values.

5. Define an array of byte and initialize it to the first 5 letters of the alphabet.

6. Define a 32-bit signed integer variable and initialize it with the smallest possible negative decimal value. (Hint: Refer to integer ranges in Chapter 1.)

7. Define an unsigned 16-bit integer variable named wArray and initialize it with three values of your choice.

8. Define a string variable containing the name of your favorite color. Initialize it as a null-terminated string.

9. Define an uninitialized array of 50 signed doublewords named dArray.

10. Define a string variable containing the word "TEST" repeated 500 times.

11. Define an array of 20 unsigned bytes named bArray and initialize all elements to zero.

12. Tell whether each of the following instructions is legal or illegal. W1 and W2 are word variables, and D1 and D2 are doubleword variables.

   a. MOV AL, BH
   b. MOV EAX, 1
   c. XCHG [W1], [D1]
   d. MOV EDX, [W1]