1. What is the value (in hexadecimal) of AL, AH, and AX given the following hexadecimal values in the EAX register? (1) 37E11449 (2) 8A29713D

(1) AH: AL:

AX:

(2) AH: AL:

AX:

2. Calculating the Size of a Word Array

List WORD 1000h, 2000h, 3000h, 4000h

ListSize = _____

3. True (T) / False (F)

```
.data
 cout BYTE 100
 Val  WORD 2

 .code
```

3.1 mov al, Val (T/F)

3.2 mov ax, count (T/F)

4. Implement Arithmetic Expressions: R = -X + (Y - Z)

```
.data
R  DWORD  ?
X  DWORD  26
Y  DWORD  30
Z  DWORD  40
.code
mov  _____ ; copy X to a proper register

_____  ;  set it to a negative X

mov  _____ ; copy Y to a proper register

_____ ; Calculate Y –Z

_____ ; Calculate –X + (Y –Z)

_____ ;  copy the result to R
```

5. Please use proper direct-offset operands to implement a correct value in the comments

```
.data
 arrayW WORD 1000h, 2000h, 3000h
  arrayD DWORD 1, 2, 3, 4

.code
  mov ax, _____ ; AX = 2000h

  mov ax, _____; AX = 3000h

  mov ax, _____; EAX = 00000003h
```

6. Write a program that does the following:

(1) Set the value of EAX to the hexadecimal value F00D.

(2) Add BEEF to EAX.

What is the value of EAX?

```
; AddTwo.asm - adds two 32-bit integers.
; Chapter 3 example

.386
.model flat, stdcall
.stack 4096
ExitProcess proto,dwExitCode:dword

.code
    main proc

            _____

            _____

            invoke ExitProcess,0
    main endp
end main
```

7. Create two variables. One should be a BYTE, the other a DWORD. Sum the two and put the answer in the EBX register.

```
.386
.model flat,stdcall
.stack 4096
ExitProcess proto,dwExitCode:dword

.data
        _____________________________


        _____________________________


.code
    main proc

        _____________________________

        _____________________________

        _____________________________

        _____________________________

        _____________________________

        invoke ExitProcess,0
    main endp
end main
```