Self-Check for Lecture#3

Solutions are posted

1. What’s wrong with the following data segment?

```plaintext
.data
  x_value DWORD 5
  7Eleven BYTE “My job”,0
  X_VALUE DWORD 500
  Age ;user’s age; DWORD ?
```

2. The following data segment starts at memory address 1400. What is the address of each variable?

```plaintext
.data
  myName BYTE “Elmer Fudd”,0
  yourName BYTE 30 DUP(0)
  myAge DWORD 45
  yourAge DWORD ?
  myScore DWORD ?
  yourScore DWORD ?
```

3. Why is it a good idea to implement a program’s output first?

4. What’s the result of the following code fragment? I.E., what registers are changed?

```plaintext
mov eax,100
cdq
mov ebx,13
div ebx
```

Given the following constant definition and data segment:

```plaintext
MY_CREDITS = 12
.data
  x DWORD 12
  y DWORD 13
  z WORD 25
```

5. What’s wrong with the following code segment statements?

```plaintext
mov ebx, z
mov y, x
mov ebx, MY_CREDITS
mov MY_CREDITS, ebx
```
Given the following data segment:

```plaintext
.data
intro_1           BYTE       "Welcome,"
username         BYTE       "Fred."
intro_2           BYTE       "What’s up?"
count            DWORD       0

6. What is displayed by the following code segment statements?

    mov     edx, OFFSET intro_1
    CALL    WriteString
    CALL    CrLf
    mov     edx, OFFSET username
    CALL    WriteString
    CALL    CrLf
    mov     edx, OFFSET intro_2
    CALL    WriteString
    CALL    CrLf
```