

Name: KEY

Id#

COE 205, Term 052
Computer Organization & Assembly Programming
Quiz# 3

Date: Wednesday, March 15, 2006

Q1. Suppose that the following data declarations are allocated in the segment given in the DS register with an offset of 0. Show the content of the allocated memory, in **hexadecimal**. Note that the ASCII code of character 'A' is 41H and that of 'a' is 61H. Also, the ASCII code of character '0' is 30H.

```
I    DB    -10, 32, '32'  
J    DW    1234H  
K    EQU    1  
L    DD    K-5  
      DW    J+16  
M    DB    2 dup(2, 2 dup('0'))
```

Variable	Memory Address (Hex)	Memory Content (Hex)
<i>I</i>	0000	F6
	0001	20
	0002	33
	0003	32
<i>J</i>	0004	34
	0005	12
<i>L</i>	0006	FC
	0007	FF
	0008	FF
	0009	FF
<i>M</i>	000A	14
	000B	00
	000C	02
	000D	30
	000E	30
	000F	02
	0010	30
	0011	30
	0012	
	0013	
	0014	
	0015	
	0016	

Q2. Write the necessary code to do each of the following:

- (i) Read a character with echo.

```
MOV AH, 1  
INT 21H
```

- (ii) Read a character without echo.

```
MOV AH, 8  
INT 21H
```

- (iii) Display the character \$.

```
MOV AH, 2  
MOV DL, '$'  
INT 21H
```

- (iv) Display the string HELLO!! in the beginning of a line.

```
MSG DB 10, 13, "Hello!!$"  
  
MOV AH, 9  
MOV DX, offset MSG  
INT 21H
```

- (v) Read a string of maximum length of 15 characters and store it in variable Iname.

```
Iname DB 16, 17 dup(?)  
  
MOV AH, 10  
MOV DX, offset Iname  
INT 21H
```