



# Princess Sumaya University for Technology Computer Engineering Dept.

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22342 Computer Organization & Assembly Language

Sun 19 Feb 2012

## Quiz 1 (5 Minutes)

Student Name: .

.. ID: .

Student Serial Number (1 – 33):

**Question:** All values are in hexadecimal.  
(2 Points) Determine the value of AX after executing the following program:

```
MOV    DI, 5
MOV    AH, [DI]
MOV    AL, [DI - 3]
```

**Solution:**

$MOV\ DI, 5 \Rightarrow DI = 5$

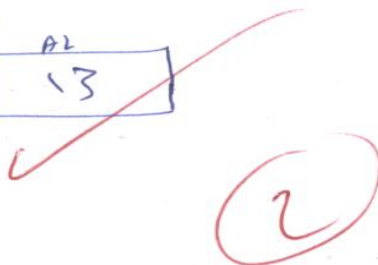
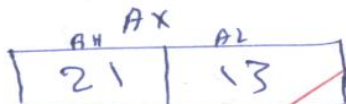
$MOV\ AH, [DI]$

$\Rightarrow MOV\ AH, [5] \Rightarrow AH = 21$

$MOV\ AL, [DI - 3]$

$\Rightarrow MOV\ AL, [2] \Rightarrow AL = 13$

$AX = 21\ 13$



DS: 4000 0  
DI: 5  
40005

AX	0
BX	0
CX	0
DX	0

SI	0
DI	5
BP	0

CS	4000
DS	4001
ES	4000
SS	4001

Memory

40000	10
40001	11
40002	12
40003	13
40004	14
40005	20
40006	21
40007	22
40008	23
40009	24
4000A	25
4000B	30
4000C	31
4000D	32
4000E	33
4000F	34
40010	11
40011	12
40012	13
40013	14
40014	15
40015	21
40016	22
40017	23
40018	24
40019	25
4001A	31
4001B	32
4001C	33
4001D	34
4001E	35
4001F	36