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Cpe 185

## Homework 7

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1a. OpCode - INC Operand - AX

1b. OpCode - Wait Operand - None

1c. OpCode - MOV Operand - DX, CX

1d. OpCode - MOV Operand - AL, [BX+6]

2. B - because 16 bits cannot go into 8 bits

C - because 8 bits cannot go into 16 bits.

3. DH = 32, 32 bits are loaded the immediate change of BX and this has no relationship with the memory location as it remains default.

4. INC WORD PTR [0200H], which is a 16-bit store command that is direct.

5. B, because registers BX BP SI DI can be used as memory pointers in a 64K segment

C because direct memory address cannot exceed FFFFH in a 64K segment.

The command may pass the register size.

6. AX = 5F48

BX = DC6E

SP = 0704

7. 34H, in this problem you and together 3C and B7 which in binary is 0011 1100 and 1011 0111 which will return values if both are 1 so you return 0011 0100 which is 34H (hex).

8. Loop OD is the default byte in that location of 36.

9.  $256 \times 512 = 131072 = 20000H$ .

DX=0002, AX=0000 (Separate byte sizes are multiplied)

10. A560

11. E, D

12. U350 L14

13. IP

14. a) byte

B) data

1.  $F9100H + 0350H + 12H = F9462H$

2. A)0601H

B)E9H

C)27E9H

D)e8db27e9h

3.  $F000H - 16 \text{ bytes} = EFF0H$

4. 7E25H

5. mov bx, 8800h

Mov al, [bx+2]

Mov [bx+12h],al

6. mov bx, 8800h

Mov si,1

Mov al,[bx+si\*4+3]

Inc si

Add al,[bx+si\*4+3]

Mov bx, a000h

Inc si

Mov [bx+si\*4+2],al

7. mov bx,8802h

Mov cx, 3c7ah

And cx,[bx]

Hlt

Flags: CF=0, PF=0