8(a):

Text

Description automatically generated

Line 16: EAX = 0000 0000h

Loop 1: EAX = 0001 0000h

Loop 2: EAX = 0003 0000h

Loop 3: EAX = 0006 0000h

Loop 4: EAX = 000A 0000h

8(b):

Text

Description automatically generated

EAX = 0000 001C

In each outer loop, EAX holds 3h at the beginning. After each loop EAX add 5h into it 5 times. So the value at the end of each outer loop (or the end of the code) is 3h + 5\*(5h) = 1Ch

8(c):

Text

Description automatically generated

AL = A3h or 1010 0011b

**mov al,01101111b**

**and al,00101101b**

* al = 00101101b

**mov al,6Dh (01101101b)**

**and al,4Ah (01001010b)**

* al = 01001000b

**mov al,00001111b**

**or al,61h (01100001b)**

* al = 01101111b

**mov al,94h (10010100b)**

**xor al,37h (00110111b)**

* al = 10100011b