## COE 205, Term 101

# Computer Organization \& Assembly Programming 

## Quiz\#4

Date: Monday, Dec. 6, 2010

(Q1) Fill the blank in each of the following:
(1) Assume that $\mathrm{ESP}=0000022 \mathrm{EH}$ and $\mathrm{EAX}=1 \mathrm{~F} 2 \mathrm{E} 3 \mathrm{D} 4 \mathrm{CH}$. Assume that the address of MPROC is 0030FEA3. After executing the instruction sequence \{PUSH EAX, CALL MPROC $\}$, the content of $\mathrm{ESP}=$ $\qquad$ .
(2) Assume that $\mathrm{AX}=4321 \mathrm{H}$ and $\mathrm{BX}=5678 \mathrm{H}$. After executing the following sequence of instructions, the content of EAX=

PUSH AX
PUSH BX
POP EAX
(3) Assume that $\mathrm{ESP}=00000100 \mathrm{H}$. After executing the instruction RET 4, the content of $\mathrm{ESP}=$ $\qquad$ _.

Q2. Write a procedure that computes and displays the sum of an array of integers. Assume that the array address and number of elements in the array are passed as parameters in the stack. The procedure should preserve the content of all registers used. Then, call the procedure to display the sum of the array given below:

Array1 DWORD 1, 2, 3, 4, 5

