

Name: KEY

Id#

COE 205, Term 042
Computer Organization & Assembly Programming
Quiz# 5

Date: Sunday, April 24, 2005

Q1. Write an 8086 assembly program to display the **hexadecimal** content of register **AX**. Do not use multiplication or division instructions. The content of register AX should remain the same.

```
.model small
.stack 100h
.data
HexTable DB '0123456789ABCDEF'
.386
.code
.startup

        MOV AX, 1234h ; example to display

        LEA BX, HexTable
        MOV SI, AX
        MOV CX, 4
Next:    ROL SI, 4
        MOV AX, SI
        AND AX, 0Fh
        XLATB
        MOV AH, 2
        MOV DL, AL
        INT 21h
        LOOP Next
        MOV AX, SI      ; restore AX value

.exit
end
```