Name: **Id#**

<div align="center">

COE 205, Term 021

Computer Organization & Assembly Programming

Quiz# 2

Date: Monday, Oct. 28, 2002

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Q1. Analyze the 8086 assembly program given below and determine what it is doing. Determine exactly what the program will output, assuming that the input entered is 62.

```
.MODEL SMALL
.STACK 32
.DATA
        CR        EQU     13
        LF        EQU     10
        msg1      DB      'Enter a 2-digit decimal number (00->99):','$'
        msg2      DB      CR,LF, 'Result= '
        result    DB      3 dup(?),'$'
.CODE
        MOV AX, @DATA
        MOV DS, AX
        MOV DX, offset msg1
        MOV AH, 9h
        INT 21H
        MOV AH, 1h
        INT 21H
        SUB AL, '0'
        MOV BL, 10
        MUL BL
        MOV CL, AL
        MOV AH, 1h
        INT 21H
        SUB AL, '0'
        ADD AL, CL
        MOV AH, 0
        ADD AX, AX
        DIV BL
        ADD AH, '0'
        MOV result+2, AH
        MOV AH, 0
        DIV BL
        ADD AH, '0'
        MOV result+1, AH
        MOV AH, 0
        DIV BL
        ADD AH, '0'
        MOV result, AH
        MOV DX, offset msg2
        MOV AH, 9h
        INT 21H
        MOV AX, 4C00h
        INT 21H
        END
```