

Name: KEY

Id#

COE 205, Term 032
Computer Organization & Assembly Programming

Quiz# 6

Date: Tuesday, May 4, 2004

Q1. Write a macro, **BDREG**, to display the binary content of a register. Assume that name of the register and the number of bits in a register are passed as macro parameters. Then, use the macro to display the binary content of register CX.

```
.model small
.stack 100h
BDREG MACRO reg, size
    local next, mysize
    JMP Next
mysize DB size

Next:
    ROL reg, 1

    PUSH AX
    PUSH DX
    MOV AH, 2
    MOV DL, '0'
    ADC DL, 0
    INT 21H

    POP DX
    POP AX

    DEC mysize
    JNZ Next

    ENDM

.code
.startup

; to display the CX register the following macro invocation is
used

    MOV CX, 10
    BDREG CX, 16

.exit
END
```