

Name:

Id#

COE 205, Term 061
Computer Organization & Assembly Programming

Quiz# 3

Date: Sunday, Nov. 19, 2006

Q1. You are required to write a procedure, **ADISPLAY**, to display a two-dimensional array of unsigned integers. The procedure receives the address of the array in register EDX, the number of rows in register ESI and the number of columns in register EDI. The procedure has to preserve all the used registers. Then, use the procedure **ADISPLAY** to display the array **TARRAY** shown below:

```
TARRAY    DD 10, 20, 300, 400, 5000
           DD 60, 70, 1000, 2000, 2
           DD 99, 16, 11000, 50, 30
```

Use the procedure **WriteDec** for displaying the unsigned integers. This procedure displays the content of the register in EAX. Note that you need to display a space between integers displayed in the same row. You can use the procedure **WriteChar** to display the character stored in register AL. You need also to display each row in a new line. You can use the procedure **CrLf** for displaying a new line.

```
.686
.MODEL FLAT, STDCALL
.STACK

INCLUDE Irvine32.inc

.DATA

TARRAY    DD 10, 20, 300, 400, 5000
           DD 60, 70, 1000, 2000, 2
           DD 99, 16, 11000, 50, 30

.CODE
main PROC

    exit    ; exit to operating system
main ENDP
```

```
; (insert additional procedures here)
```

```
END main
```

