Name: **Id#**

COE 205, Term 062

Computer Organization & Assembly Programming

Quiz# 3

Date: Wednesday, April 11, 2007

Q1. You are required to write a program to display a given row of a two dimensional array of unsigned integers, TARRY. Assume that each integer is stored in a double word. To do that you need to do the following:

   (i)   Ask the user to enter a row number.

   (ii) In a new line, print the selected row.

Use the procedure **WriteDec** for displaying the unsigned integers in the array. Note that this procedure writes the content of EAX in unsigned decimal format to standard output. The procedure **WriteString** writes a null-terminated string to standard output. String address should be passed in register EDX. The procedure **WriteChar** writes character in register AL to standard output. The procedure **Crlf** writes end of line sequence (CR, LF) to standard output. The procedure **ReadDec** reads a 32-bit unsigned integer and returns it in EAX. **You only need to show the data and code segments of the program.**

A sample execution of the program for the array given below is shown:

        TARRAY   DD 1, 5, 300, 100, 5000
                    DD 600, 0, 1110, 2000, 2
                    DD 99, 16, 150, 530, 440

        Enter a row number: 1
        Row# 1:
        600 0 1110 2000 2