COE 205, Term 062

Computer Organization & Assembly Programming

Programming Assignment# 1
Due date: Wednesday, April 11, 2007

Q.1.   Write an assembly program that does the following:

(i)   Ask the user to enter the number of rows R and read it.

(ii)   Ask the user to enter the number of columns C and read it.

(iii) Ask the user to enter a two-dimensional array of RxC characters. Elements of a single row should be separated by a single space and each row is read in a new line.

(iv) Print the entered array in a new line printing also its entered dimensions.

(v)   Ask the user to enter two row numbers

(vi) Exchange the two entered rows and print the array after the exchange.

Note: Do not use multiplication instructions in your solution.

A sample execution of the program is shown below:

Enter number of rows in the array: 3
Enter number of columns in the array: 5
Enter an array of 3x5 characters:
0 1 2 3 4
5 6 7 8 9
a b c d e
The entered 3x5 array is:
0 1 2 3 4
5 6 7 8 9
a b c d e
Enter two row numbers: 0 2
The array after exchanging Row 0 and Row 2 is:
a b c d e
5 6 7 8 9
0 1 2 3 4

The solution should be well organized and your program should be well documented. Submit a soft copy of your solution in a zip file. The soft copy should include a Readme file indicating the file names containing the solution and whether it works or not. The Readme file should also contain your name and ID. Submit both source code file (i.e. .asm) and the executable file (i.e. .exe).