

COE 205, Term 052

Computer Organization & Assembly Programming

Programming Assignment# 2

Due date: Saturday, April 8 , 2006

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

- (i) Ask the user to enter the number of rows N (maximum 99) and read it.
- (ii) Ask the user to enter the number of columns M (maximum 99) and read it.
- (iii) Ask the user to enter a two-dimensional array of NxM numbers. Each number is a score between 0 and 100. Elements of a single row should be separated by a single space and each row is read in a new line.
- (iv) Ask the user to select a column.
- (v) In a new line, print the scores in a column, their sum and their average rounding the result to one decimal digit.

A sample execution of the program is shown below:

```
Enter the number of rows: 5
Enter the number of columns: 4
Enter an array of 5x4 scores:
99 100 20 80
30 27 88 70
90 85 60 25
45 64 75 55
70 68 58 90
Select a column: 1
The scores in column 1 are:
100
27
85
64
68
The sum of the scores is: 344
The average of the scores is: 68.8
```

It is very important that you strictly follow the format given to you in the sample execution of the program.

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).