

## COE 205, Term 042

### Computer Organization & Assembly Language Programming

#### Programming Assignment# 3

Due date: Tuesday, April 19, 2005

**Q.1.** It is required to write an assembly program that does the following:

- (i)** Ask the user to enter a number in **decimal**.
- (ii)** Read the entered number. Assume that there is no predetermined size for the number. When the user hits return this will be the end of the inserted number.
- (iii)** Ask the user to enter the base of the output to which the number needs to be converted. Assume that any base is acceptable.
- (iv)** Print the entered number in the required base. Only the significant digits have to be printed.

Assume that the number is unsigned. A sample execution of the program is shown below:

Enter a decimal number: 20  
Enter the base of the output number: 2  
The converted number in base 2 is: 10100

Enter a decimal number: 33  
Enter the base of the output number: 16  
The converted number in base 16 is: 21

*Include both hard and soft copy of your solution. The hard copy should be well organized. Make sure that your program is well documented. The soft copy should be supplied in a floppy disk along with a Readme file describing its content.  
Both the hard and soft copy should be submitted in an envelope that has your name and ID.*