EE334 Computer Architecture **Spring 2004**
Lab 5: N Factorial Using Recursive Calls

You are to write a program that computes N factorial using recursive function calls. The factorial of a number N is defined as:

$$N! = 1 \times 2 \times 3 \times 4 \times \cdots \times N$$

By definition 0!=1

You are to implement the classical definition of N! which is:

$$N! = N \times (N-1)!$$

This program requires the use of the stack to save the return address.

Your program will get integer numbers through the console. Once the factorial is computed, your program will display this number at the console. Your program will go back to receive a new number and display the factorial. This will continue until a negative number is entered,

REPORT

Please include the following items in your report.

1. Explain how your program works. You may use a flow chart, pseudo C program, or other way to explain the program.
2. Show examples that test your code
3. Conclusion. Explain what you learned here and what was difficult about this lab
4. A print out of your program.
   # ***Include comments in your program.*** **Points will be deducted if there are**
   # **no comments that help understand your program.**

SHOW AND TELL. Please give a demonstration of your program to your TA.

REPORT IS DUE: March 5 (in class). {late reports will get 15 points off}

TAs for this course are:

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Ms. Li Zhao	Sloan 337	lzhao@eecs.wsu.edu	Thursday 9AM-12noon
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