

## Lab 1

### Problem 1

Write a recursive function that computes the factorial of a given number. Entering 6 would compute  $6*5*4*3*2*1 = 720$

### Problem 2

Write a recursive function to print a multi-digit number vertically. 84172 would be printed:

8  
4  
1  
7  
2

Hint: Be sure to test your function with numbers of different length!

### Problem 3

Write a recursive function that will print a triangle of x's with  $n$  rows. An input of 5 should print:

X  
XXX  
XXXXX  
XXXXXXX  
XXXXXXXXX

Hints: Find a correlation between the row # and # of x's.