**CS2640 Homework #4**

**Combinatorial Calculator**

**Due 10/20/2020**

Write a recursive function that computes Comb(n, r), where n >= r and r >= 0.

Comb(n, r) = 1 if n == r or r == 0

Comb(n, r) = Comb(n - 1, r) + Comb(n - 1, r - 1)

Build some test scaffolding that asks the user to enter the values for *n* and *r*. Do some checking on the values to make sure they are valid. Then call the function, and print the answer.

Submit a hardcopy of your program and a printout of several runs. Check this in to Blackboard when you are done.

Be sure you enter your name in the comment block at the start of the file!

## Grading:

This homework is worth 8% of your grade.

Your score will be computed as follows:

4 points: The code is functional, produces the correct result for some test cases

1 point: The correct answer is computed for all of the test cases

1 point: The program does input validation

1 point: The code uses standard register conventions, all registers that should be saved  
 are saved.

1 point: The code is well documented with comments.

## Due:

This homework is due Oct 20, 2020