

**INFSCI 2591: Algorithm Design**  
**Project 1**  
**Due: September 20, 2016**

Write two programs, one for the Ala Carte Multiplication algorithm and one for the Rectangle Multiplication algorithm. Your programs must allow for both positive and negative multiplicands and multipliers.

Submit your project in a single PDF file on courseweb. The file must include: (1) a pseudocode for each algorithm; (2) the test results of the programs for several pairs of multiplicands and multipliers (your programs must be tested by using the test cases provided in courseweb) ); and (3) a report discussing the differences between the two programs with respect to data structure and memory usage. You should also submit the source code for the two programs in one separate zip file.

**Points**

Pseudocode	10
Correct algorithms (handling all test cases)	60
<ul style="list-style-type: none"><li>• Positive numbers: 20</li><li>• Negative numbers: 20</li><li>• Numbers of different sizes: 20</li></ul>	
Source code	10
Code readability/documentation	10
Report	10
Total:	100