**CS 301, Summer 2017**

**Lab 3**

**DUE: 11:59pm Sunday, July 16**

**60 Points Total**

1. Implement a Racket function that prompts for an input filename and an output filename. For each number in the input file, the program should deliver to the output file the result of executing the functions **Two-LHS** and **Two-RHS** developed in last week’s lab.

For example, if the input file has the values 1, 3, 5, 7, the output file should have the value (and formatting):

1. 1
2. 3

5 15

7 28

Call this function **Sum-Up**.

1. Do the same thing for **Three-LHS** and **Three-RHS**. Call this function **Sum-Squares**.
2. Implement a function that prompts for an input and output filename. The function should read the two lists in the input file and deliver to the output file their **Symmetric-Difference** when interpreted as sets. You may assume that the input file contains exactly two lists and that they obey the logic of sets, i.e., they contain no duplicates.

**To turn this assignment in:**

This lab will be turned in by posting a single Racket program containing a definition of all the functions specified, (including **Two-LHS**, etc.).