

# COSC 251 – Lab #8

Lisping in the darkness.

Purpose: Get used to using emacs and LISP.

Task: For this lab, I'd like you to create three functions (like we have for previous languages). Two of these functions should be familiar to you: summation and Fibonacci. The third function will be to create an approximation of  $\pi$  using a form of the Gregory-Leibniz series:

$$\pi = 4 \sum_{i=0}^n (-1)^k / 2k + 1 = 4 - 4/3 + 4/5 - 4/7 + 4/9 - \dots$$

Note that n should be passed as a parameter to the functions you create.

Each function should return the value as appropriate, not printed.

Deliverable: the lisp code that you create. It must be submitted via Digital Dropbox.

Due: By the start of class Monday. No exceptions. To be turned in via Digital Dropbox.