#### CSE 465/565

#### Homework #2: 65 points

#### **Outcomes:**

- Understand how a functional language works and understand some of the difficulties
- Calling a function from another scheme file
- Practice writing Scheme codes
- Running and testing a scheme code

# **Scoring:**

- (45 pts) Successful implementation of all 9 or 11 (2 extra questions for graduate students) problems.
- (10 pts) Correct submission on GIT with more than 5 commits (6 or more).
- (10 pts) The quality and style of your code.

### **Requirements:**

- On your laptop, add a new folder inside your 'CSE465\_565' folder, and call it 'Homework2'.
- Download the 'hw2.scm' and 'zipcodes.scm' files from canvas and save them inside the 'Homework2' folder.

### **Instructions:**

- Complete all functions in 'hw2.scm'. Use the function names exactly as they appear in 'hw2.scm'. Read the notes in hw2.scm for a description of what these functions should do.
- There are two functions that are intended exclusively for graduate students, as specified in the function notes. These functions are:
  - o getCommonPlaces2
  - getDistanceBetweenZipCodes
- You are allowed to add extra helper methods as you wish.
- You MUST submit your code on GIT with more than 5 commits. The point of using GIT is more than just a place to upload work on. You always want to show the progress of your work through multiple commits on your GIT to add authenticity to your work.
- You are required to submit your code on GIT, ensuring that you make more than five commits.
  The purpose of using GIT extends beyond merely uploading your work; it serves to
  demonstrate the progression of your work through multiple commits, thereby adding
  authenticity to your efforts.

# **Test your program:**

Come up with more tests inside hw2.scm and test your program comprehensively. Your methods will be tested with more tests

# **Submission:**

Submit the GitHub/GitLab URL of the project 'Homework2'.