

# Week 5 Exercises Part1

Sandra Batista

1.1-1.2

## Exercise1: Zip codes

---

Starter code:

[https://github.com/sandraleeusc/csci104\\_fall2020\\_lecture/blob/master/map\\_zip.cpp](https://github.com/sandraleeusc/csci104_fall2020_lecture/blob/master/map_zip.cpp)

Data file:

[https://github.com/sandraleeusc/csci104\\_fall2020\\_lecture/blob/master/zipcodes.txt](https://github.com/sandraleeusc/csci104_fall2020_lecture/blob/master/zipcodes.txt)

Edit map\_zip.cpp and view the data file zipcodes.txt

- We have written code to read in all the zipcodes in zipcodes.txt into a vector 'all\_zips'
  - Iterate through the zipcodes in 'all\_zips' using an **iterator**
1. Create a map that stores zip codes as the keys and the number of occurrences as the value
  2. Then Iterate through your map and print out your results
  3. Sort the vector of zipcodes
  4. Find the number of occurrences of the first zip code in sorted order without using the map
  5. Bonus: How can you sort the pairs in the map?

## Exercise 2: Practice Midterm Exam Question

---

This previous exam question will give you practice using STL container classes and designing your own class.

Here is the sample exam question:

[https://github.com/sandraleeusc/csci104\\_fall2020\\_lecture/blob/master/magazine\\_blank.pdf](https://github.com/sandraleeusc/csci104_fall2020_lecture/blob/master/magazine_blank.pdf)

**Please note that the function `getValueOfMostRecentM` does not need to be a constant member function. (Why?)**