## lab 04 Performance Analysis

**Instructions:** In this lab we will empirically deduce the runtime performance of given functions. Inside of src/main.cpp you will see 5 functions (problem1, problem2, problem3, problem4, and problem5). For each of the functions:

- 1. **Empirically** generate a performance graph (via gnuplot) for each function. These may be separate files or all in one file. Make sure it is obvious which plot is which.
- 2. Determine the **theoretical** Big O of each function. Write ALL Big-O answers in one file.

## How to turn in:

Turn in via GitHub. Ensure the file(s) are in your directory and then:

- \$ git add <files>
- \$ git commit
- \$ git push

Due Date: January 30, 2019 2359

Teamwork: No teamwork, your work must be your own.