### **Problem Set 0**

Welcome to CS103! This assignment is designed to help you get your development environment set up and running so that you can compile, run, and debug C++ programs. There isn't any actual programming or math involved, and we hope that this doesn't take you too much time to complete. It's mostly a way for us to ensure everyone has a working development environment before the first major problem set goes out on Friday and that everyone knows how to submit on GradeScope.

This assignment must be completed individually. Working in pairs is not permitted. Due Friday, January 12<sup>th</sup> at 2:30PM. No late submissions accepted.

### Step One: Download and Install Qt Creator

Your first task is to download and install Qt Creator, the development environment that we'll be using in CS103 this quarter. To do so, visit the website (<a href="http://cs103.stanford.edu">http://cs103.stanford.edu</a>) and click the "Qt Creator" link under the "Resources" section and follow the instructions there. If you run into trouble installing Qt Creator, don't panic! There's a large troubleshooting guide available through the Qt Creator link, and if that fails, feel free to ask for help on Piazza or in office hours.

The instructions for installing Qt Creator are the same here as they are for CS106B/X. If you've taken CS106B/X within the past year, you should be able to use the install you already have set up. If you've taken CS106B/X longer ago than that, you should follow the instructions to get the newest version.

### Step Two: Download the Starter Files

Now that you've got Qt Creator set up and ready to go, you can start compiling and running C++ programs! To help you get some practice importing and building projects, go to the CS103 website and download the starter files for Problem Set 0 and open them in Qt Creator.

## Step Three: Find a Multiple!

The program that you've just downloaded implements a surprising mathematical result: for any positive natural number n, there's a nonzero multiple of n whose digits in base 10 are all zeros and ones. Run the provided program, play around with it a bit, and use it to find a number that's a multiple of 137 composed purely of 0s and 1s. Copy that number somewhere – you'll need for Step Five.

## **Step Four: Read About the Honor Code**

You are required to read the handout on the Stanford Honor Code on the CS103 website before submitting assignments in this class. Take a minute to read over it before proceeding to the final step.

# Step Five: Answer Some Questions, and Submit Everything!

Once you've finished everything, go to the file Answers.h and follow the directions in the comments to answer some questions about the number you found in Step Three and the Honor Code. Then, submit the file Answers.h to GradeScope by following the directions in our Problem Set Policies handout. Our autograder should get back to you with feedback, and you're welcome to (in fact, encouraged to!) submit as many times as is necessary to earn full credit.