

CS246—Assignment 0

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Due: Friday, September 13, 2024, 5pm (If you joined the course late, this due date is automatically extended to 48 hours after you join. It will show up as late on Marmoset, but submit anyway.)

This assignment is designed to get you ready to do the assigned work in this course. **It is not worth any marks, but you must get 100% on this assignment to get credit for the other assignments.**

1. Read the course outline at

`https://student.cs.uwaterloo.ca/~cs246/F24/outline.shtml`

2. Log into your `linux.student.cs` account and execute the command `ls`. You should see a directory entitled `cs246`. If you do not see this directory, create it via the command `mkdir cs246`.

3. Navigate to your `cs246` directory: `cd cs246`.

4. Check out the course GIT repository (this only needs to be done once):

```
git clone ssh://linux.student.cs.uwaterloo.ca/u/cs246/pubrepo/1249/.git
```

5. Verify that the checkout succeeded: `ls`. You should see a directory called `1249`. (Parenthetical note: 1249 is Quest-speak for Fall 2024. The last digit is the month, and the first three digits, added to 1900, give the year.)

6. Execute the following two commands:

```
cd 1249
git checkout master
```

7. Verify that your `1249` directory has files in it.

8. Navigate to your home directory: `cd` (or `cd ~`).

9. Determine whether your home directory contains a file called `.bashrc` — if it doesn't, `cp .profile .bashrc`; if it does, move on to the next step. If you're missing the `.profile` file, you can copy the one from `/etc/skel/.profile` over first (`cp /etc/skel/.profile ~`) and then proceed.

10. Using a text editor, open the file `~/.bashrc`. This file should not be empty; if it is, check that you have typed the name of the file correctly. Add the following lines to the *end* of this file:

```
source ~cs246/setup
source ~cs246/setup2
alias g++20="g++-14.2.0 -std=c++20 -fmodules-ts -Wall -g"
alias g++20h="g++-14.2.0 -std=c++20 -fmodules-ts -c -x c++-system-header"
```

(Optional) We recommend also adding the following lines to the end of this file:

```
alias vim="vim -X"  
export EDITOR=vim
```

If you choose to use vim, these lines will make vim launch faster, and will ensure that other tools (like git) default to vim when they launch a text editor. If you choose to use emacs, omit the first line, and replace vim with emacs in the second line. Save your changes and exit.

11. Navigate to your ~/cs246/1249/a0 directory, and in that directory, create a text file called `promise.txt` that contains the following text, all on one line:

```
I promise not to publicly ask for or provide hints about Marmoset test cases  
or assignment solutions on Piazza or anywhere else.
```

As is **always** the case for non-empty text files, make sure this file ends with a newline character, and use `wc` to verify that this file contains exactly one line.

12. Use your `g++20h` command to compile the system header files imported by the program in the file `pgm.cc`. Use your `g++20` command to compile the program `pgm.cc` itself. When you run it, it should produce the file `pgm.txt`.
13. Make a zip file containing all of the files in your a0 directory that end in “.txt”: `zip a0.zip *.txt` — make sure you are in your `cs246/1249/a0` directory when you do this.
14. Read these documents about submitting assignments to Marmoset:

```
http://www.student.cs.uwaterloo.ca/~cs246/current/marm\_sub/index.html
```

15. Submit the file `a0.zip` to Marmoset.