Using Git to Get and Submit Lab Code

To use the commands in this guide, you will need Git and ssh on your local machine. If you followed the directions for getting started on your operating system, you should already have these programs.

1 Cloning a Lab Repository

The initial code, testbenches, and makefiles for the labs are provided in personal Git repositories stored in the 6.S084 course locker. To work on these files, clone them in a local work directory using the following command (substitute \textit{labN} with the appropriately numbered lab, such as lab1, lab2, etc., and substitute \textit{username} with your MIT Athena username)

\$ git clone username@athena.dialup.mit.edu:/afs/athena.mit.edu/course/6/6.s084/students/username/labN.git

(The line break in the above command is only there since the command is so long. You should not type enter or add a space after \textit{students}). Running this command should prompt you for your Athena password. If this command fails, it’s probably because we don’t have your Athena user name. Please send the course staff an e-mail describing your problem and your Athena username, and we will look into this issue.

The \texttt{git clone} command creates a \textit{labN} directory in your current directory. This will be your personal copy of the files required for the lab. The directions for using these files will be specified in each lab’s handout.

If there are discussion questions in the lab, they should be answered in the \texttt{discussion.txt} file provided in the repo.

2 Locally Committing your work

With Git, you can create checkpoints, or \textit{commits}, in your repository which can be reverted to in the future. To create a local commit, execute the following command within your repository:

\$ git commit -am "Hit milestone"

If you would like, you can replace \texttt{Hit milestone} with a more descriptive message.

3 Submitting Your Work by Pushing

Running \texttt{git commit} is a purely local operation; it does not update your repo in the course locker. To make changes to your repo in your course locker, which is required when submitting your lab or sharing code with TAs, you need to perform a \texttt{push}. You can commit and push by running the following commands within your repository:

\$ git commit -am "Finished lab"
\$ git push

You can submit multiple times before the deadline if you would like.