CPSC Midterm 1 preparation

# GIT version control

Version Control System (VCS) keeps tracks of changes made to a set of files over time.

## 3 types of VC:

* Local VCS
  + Manages changes of files in local computer.
* Centralized VCS
  + Versions of files in a single server. Client must check out files from server. Changes are made on the server.
* Distributed VCS
  + Clients may have copies of the versions of files and are able to update versions on server. Git.

## Git Terminology

* Working tree: what is seen on the file system
* Staging area: stores the files that are tracked and ready to be committed. The **git add** command moves the files from working tree to the staging area.
* History: stores all changes made in the *.git* hidden directory. After each **git commit**, the history is updated.

## Tracking a local project

* ***Ls -la***: to list the file’s contents.
* ***Git init***: to initialize empty Git repository.
* ***Rm -rf .git***: to stop tracking a project.
* ***Git status***: to check status of a project
* ***Git add <<doc***.***type>>***: to track a file in project
* ***Git add –all***: to track all files in project
* ***Git commit -m ‘txtxtxtxt’:*** to make a commit with a comment
* ***Git log***: to check all versions of the tracked file
* ***Git reset <<doc***.***type>>***: to remove a file from a staging area.
* ***Git reset***: to remove everything from the staging area.
* ***Git checkout <<previous-hash-value>>:*** to revert previous version

# Python basics

# Data structures

# Control Structures