Program 2: getopt\_long()

CSCI 4547 / 6647 Systems Programming

Fall 2020

# Goals

1. To develop a command language for a utility that combines features from find and grep.
2. To use getopt\_long() to process options.
3. To learn or review some parts of C++ that will be needed in this course.

# The Project

The command that you develop will be named sniff. It will search your disk for files that contain one or more of a set of words that will be given on the command line. Design a command-line language to meet these specifications:

* There must be short switches, long switches, and a switch with an argument.
* Some but not all of the short switches must have synonymous long switches, and vice versa.
* Allow both case-insensitive searches and case-sensitive searches (the default).
* Allow a search to start in the current working directory (the default) or in a subdirectory , for which a pathname is supplied.
* The default is screen output, but provide a switch with a filename argument to use for output.
* Provide a switch to allow verbose output, that is, print the name of every file and directory that is opened. This information can be crucial during development and debugging.
* Provide a help switch that will give info about how to use sniff.
* The command line should provide a single quoted string of search words, separated by spaces.

Write a document that describes your command language and explains how to use it.