This is a small programming assignment designed to give you experience in making system calls, reading manual pages, and writing makefiles which are a way to manage compilation.

Directories are actually special files that contain information about other files. In this assignment, you will write your own version of the `ls` command which lists files in a directory. Your version of ls, **listdir** will be significantly simpler than the standard ls.

Basic functionality when user executes **listdir**:

1. If no command line arguments are given, the current directory is listed with a newline after each file including the last one. By default, any file starting whose first character is `.` will not be listed unless the hidden flag is set (see below).

2. An optional flag, `-h` (for hidden), may be specified which will list all files or directories including those that start with a '`.`'.

3. One or more command line arguments may be given. Each argument is a directory to list, i.e., `listdir a02 a03` should list the files in directories `a02` and `a03`. If any of the specified directory files cannot be accessed, the error `Cannot access a02` should be printed.

4. You must create a *Makefile* such that when someone types `make` in your working directory it will compile the program with an output of `listdir`.

You will need the system commands `opendir`, `closedir`, and `readdir` to complete this task. For details on how to use these, you can use UNIX's man pages. There is also an online version at `https://www.kernel.org/doc/man-pages/`. You may find it easier to use `getopt` to parse the -h flag, but this is not required.