

Linux C and C++ Programming

More help is available on line. It may be accessed by the **man gcc** command.

Compiling:

`gcc filename.c` - default compile, compiles and links one program, creates the executable file called `a.out`

`gcc -c filename.c` - compiles one program without linking, creates the object file called `filename.o`

`gcc -o outfile file1.o file2.o filen.o -lm`
- links the object files `file1.o file2.o`, etc. with the math library and produces the executable file specified by `outfile`.

Common C Options:

For a more extensive listing type: **man gcc**

- ansi - strict ANSI mode, any violation will create an error
- c - prevents the link editor from linking the program after compilation
- g - produce symbol table for full debugging. Use for gdb.
- I *directory* - causes the compiler to search for include files in the specified directory in addition to the default directory (`/usr/include`).
- l*mylib* - search library named *mylib* for unresolved symbols
- L*dir* - Add directory named *dir* to the list of directories to be searched.
- o *file* - uses the specified file as the name of the resulting program if not used the resulting program is `a.out`
- v - lists compiler phases as they are executed
- w - suppresses warning messages
- Wall - give warnings about possible errors in the source code