Header files: defining the interface

#include<stdio.h>

versus

#include"class.h"

- Angle brackets versus quotes tells compiler where to look for the file
- Gets copied in by preprocessor and then compiled in the .c file
- A .h file is never in the compile command

gcc –o exe –Wall program.c

.c files: the implementation

- Contain C code
- Do get compiled separately
- Are *linked* after compilation to form the executable

gcc –o exe –Wall program.c funcs.c

Header guards

- We don't want to include headers multiple times, but they may reference one another
- Solution: header guards

#ifndef FILENAME_H

#define FILENAME_H

/* ... Declarations here ... */

#endif

Makefiles

- Once we have many .c files, which should be recompiled?

- -c flag in gcc only compiles, does not link

- a Makefile consists of rules (saying what depends on what) that make follows to recompile any changed code.

target: dependencies

      what to do (how to build target)