

THE #1 PROGRAMMER EXCUSE
FOR LEGITIMATELY SLACKING OFF:
"MY CODE'S COMPILING."

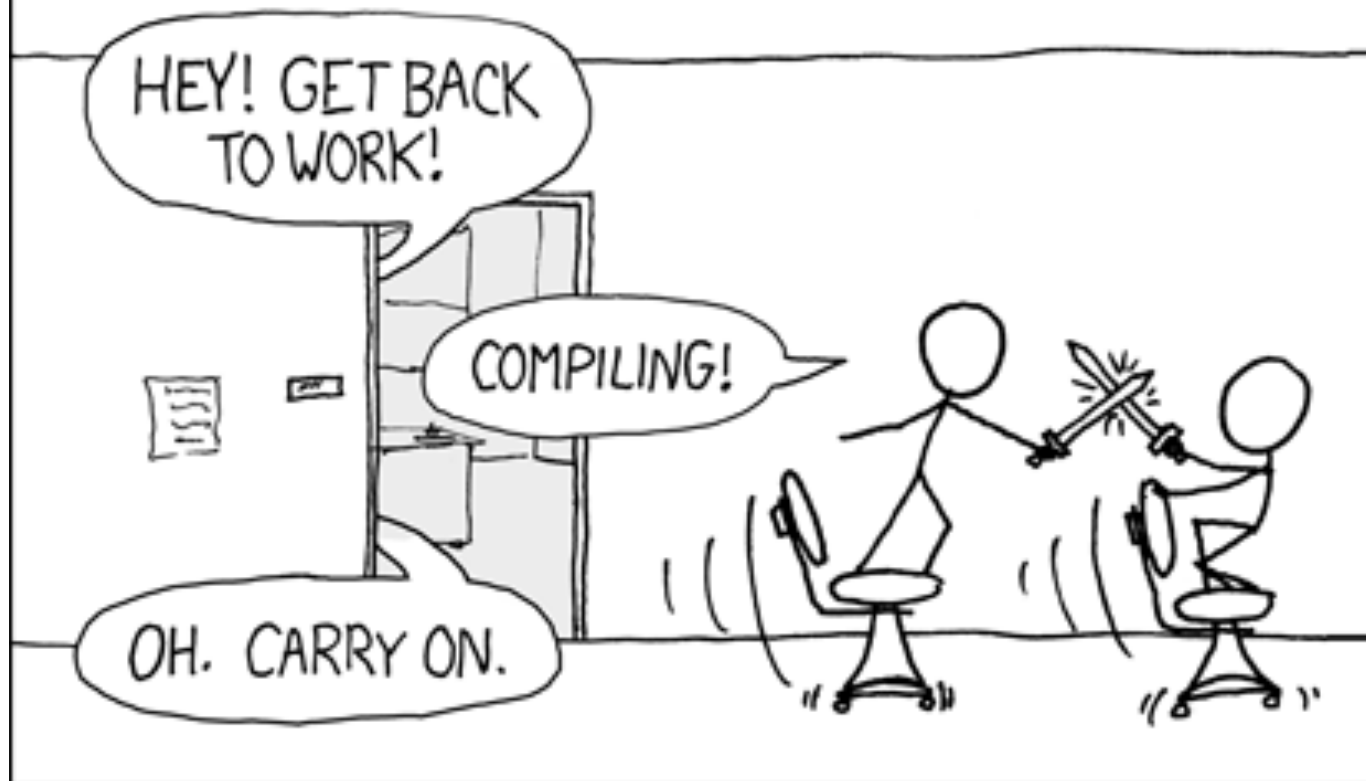
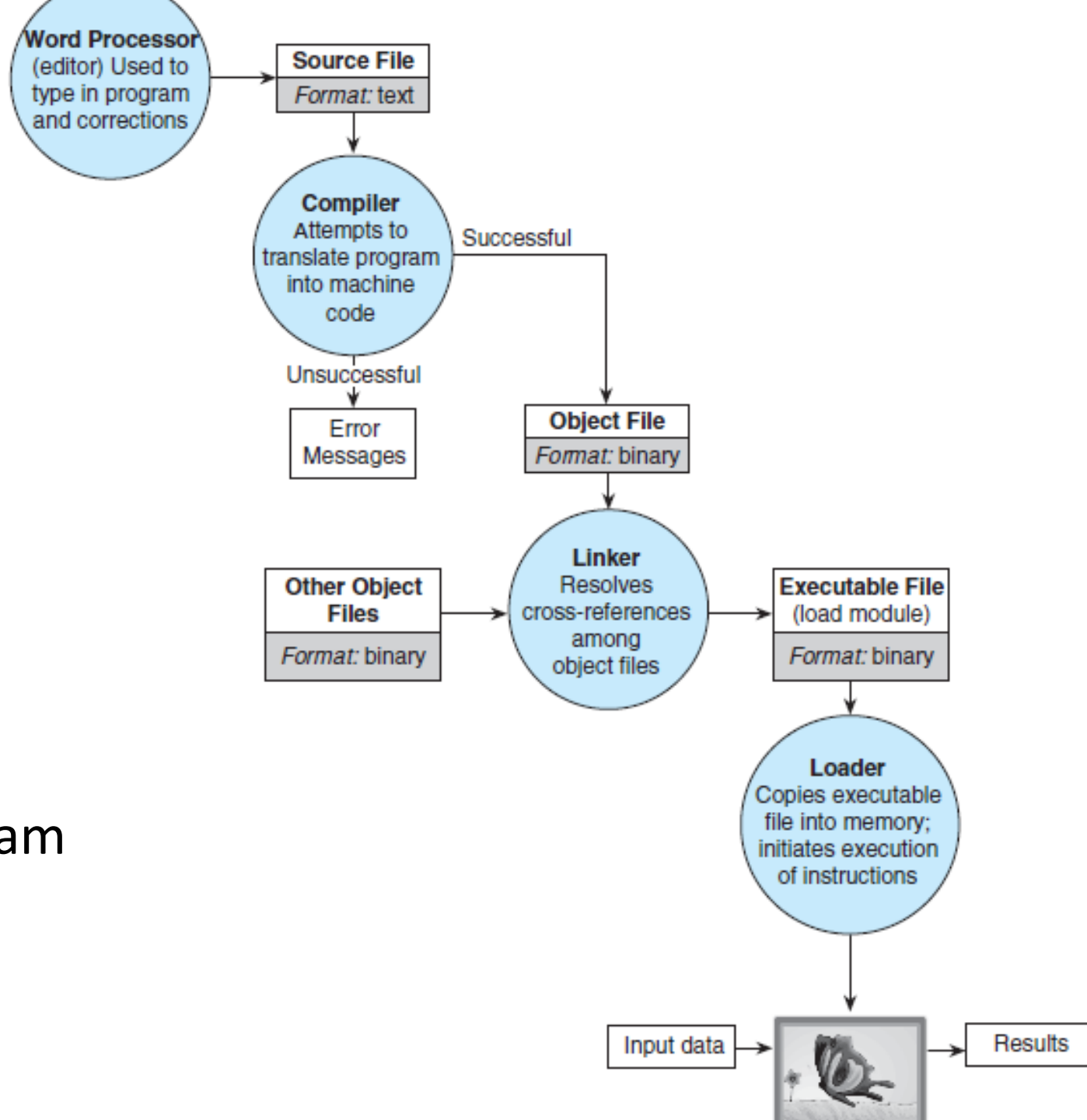


Figure 1.11
Entering,
Translating,
and Running
a High-Level
Language Program



Object files

- use .o extension
- -c flag in gcc only compiles, does not link
- running gcc on object files will link them

```
gcc file1.o file2.o
```

warning: -o does not make object files! -c does.

Makefiles

- Once we have many .c files, which should be recompiled?
- a Makefile consists of rules (saying what depends on what) that make follows to recompile any changed code.
- first rule is default target (final executable, for us)

target: dependencies

 what to do (how to build target)

warning: tab is required

```
exe: student.o student_prog.o
```

```
gcc -o exe student.o student_prog.o
```

```
student_prog.o: student_prog.c student.h
```

```
gcc -c student_prog.c -Wall
```

```
student.o: student.c student.h
```

```
gcc -c student.c -Wall
```

- exe depends on student.o and student_prog.o
- student_prog.o depends on student_prog.c and student.h
- student.o depends on student.c and student.h

Makefiles

- can run with specific targets

make mytarget

- clean should clean up directory by removing object and executables

make clean

- can use variables