## THE #1 PROGRAMMER EXCUSE FOR LEGITIMATELY SLACKING OFF: "MY CODE'S COMPILING." HEY! GET BACK TO WORK! COMPILING! PW. 13 OH, CARRY ON.

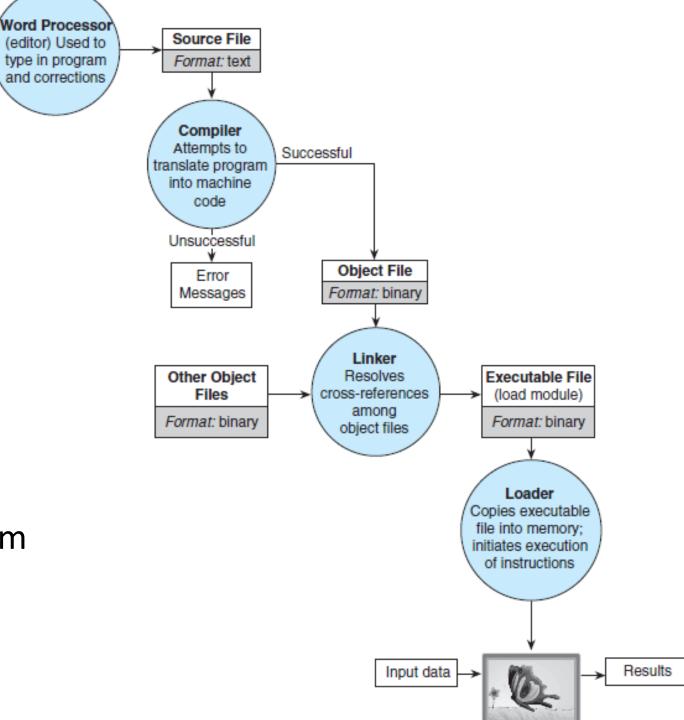


Figure 1.11
Entering,
Translating,
and Running
a High-Level
Language Program

## 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