

Introducing Java

CSC207 Winter 2015



Interpreted vs. Compiled

Interpreted:

- e.g., Python
- Translate and execute one statement at a time

Compiled:

- e.g., C
- Translate the entire program (once), then execute (any number of times)

Hybrid:

- e.g., Java
- Translate to something intermediate (in Java, bytecode)

Running Programs

What is a program?

What does it mean to “run” a program?

To run a program, it needs to be translated from a high-level programming language it is written in to a low-level machine language whose instructions can be executed.

Roughly, two flavours of translation:

- Interpretation
- Compilation

Compiling Java

You need to compile, then run (as described above).

If using command line, you need to do this manually.

Most modern IDEs offer to do this for you (Eclipse does).

But you need to be aware of what’s happening under the hood!