



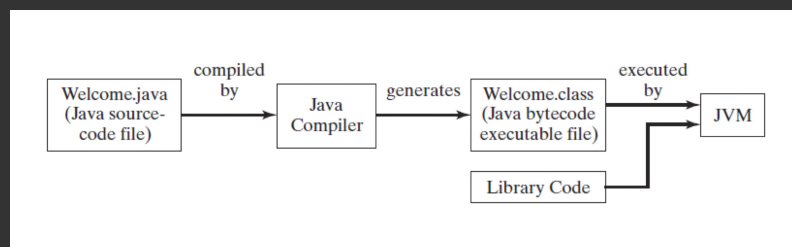
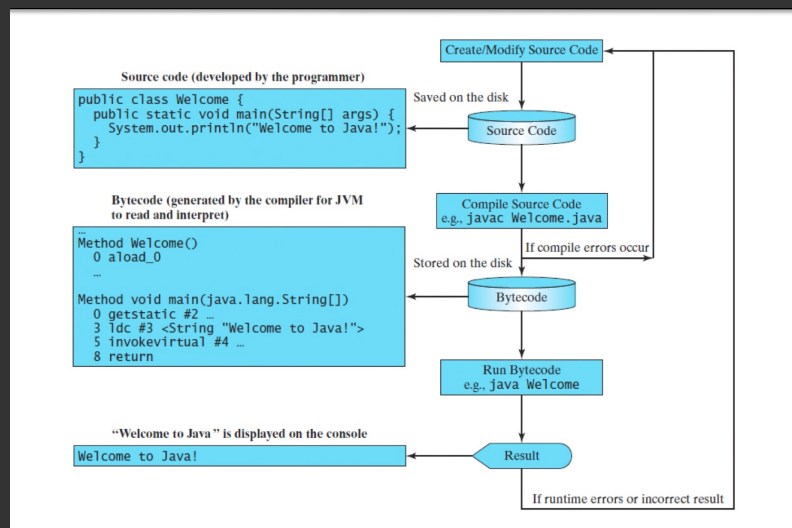
B07 Sept 20 Lec 1 Notes

What is Java?

- ↳ Object-oriented programming.
- ↳ Write once, run anywhere
- ↳ Widely used in industry.

3 Main steps

- Writing the source code using a text editor
- Translating the source code into Java bytecode using a compiler
 - ↳ Byte code is similar to machine instructions but is architecture neutral and can run on any platform.
- Execute the bytecode
 - ↳ JVM is an interpreter: it translates bytecode into the target machine language code one at a time.



Data Types

- ↳ Eight primitive types:
 - ↳ byte, char, short, int, long, float, double, boolean
- ↳ Objects
 - ↳ Defined using classes.
 - ↳ Java provides wrapper classes to use primitive types as objects (e.g., Integer, Double, etc.)

Classes

- ↳ A typical Java class includes:
 - ↳ Data fields to represent the state of an object.
 - ↳ Methods to represent the behaviour of an object.
 - ↳ Special type of methods, known as constructors.

