# Installing the OpenJDK

### Java Platform, Standard Edition

- Contains the tools to compile and run Java programs
  - javac, java, javadoc
  - Java APIs for the Java Class Library
- OpenJDK is the official reference implementation for Java SE
  - Implements all requirements of the Java Language Specification
    - Available for Linux, macOS, Microsoft Windows, and others
  - Many companies contribute to OpenJDK

## OpenJDK Builds

- See wikipedia.org/wiki/OpenJDK
- There are many implementations available
- You will need to know:
  - the version of OpenJDK you want:
    - Version 21 has long-term support
    - Version 23 appears to be the latest
  - your operating system: ?
  - your hardware architecture: x86\_64 or ARM?

## Install process

- Download
- Verify integrity of downloaded file
- Extract (unzip) or run the installer program
- Confirm the version:
  - <install path>/bin/java -version
  - Windows uses backslashes: <install path>\bin\java -version
- Set the JAVA\_HOME environment variable
- Add JAVA\_HOME/bin to your PATH environment variable

## Compile and run a test program

- Download Hello.java from Blackboard
- Open a terminal or command window
- cd to directory containing Hello.java
- Compile the source code: javac Hello.java
- Run the program: java Hello