# Installing Java and Spring Boot

## Step 1: Install Java

1. Download Java Development Kit (JDK):  
 - Visit the official Oracle JDK website: https://www.oracle.com/java/technologies/javase-downloads.html  
 - Alternatively, use OpenJDK: https://jdk.java.net/  
2. Install JDK:  
 - On Windows: Run the installer and follow the instructions.  
 - On macOS: Use Homebrew (`brew install openjdk`)  
 - On Linux: Use package manager (`sudo apt install openjdk-17-jdk` or `sudo yum install java-17-openjdk`)  
3. Verify Installation:  
 - Run `java -version` in the terminal to check the installed version.

## Step 2: Install Spring Boot

1. Install Spring Boot CLI (Optional):  
 - On Windows: Download from https://start.spring.io/ and extract the ZIP file.  
 - On macOS/Linux: Use SDKMAN (`sdk install springboot`)  
2. Install Spring Boot using Maven or Gradle:  
 - Maven: Add `<dependency>` in `pom.xml` (`spring-boot-starter-parent`)  
 - Gradle: Add `implementation 'org.springframework.boot:spring-boot-starter'` in `build.gradle`  
3. Verify Installation:  
 - Run `spring --version` to check Spring Boot installation.  
 - Create a sample app: `spring init --dependencies=web myapp`  
 - Run the application: `mvn spring-boot:run` or `gradle bootRun`.