Java Installation Guide (Mandatory Prerequisite for CCP6224-Labs)

HOW TO INSTALL AND RUN JAVA CODE ON WINDOWS, LINUX, AND MACOS

This guide explains how to install the Java Development Kit (JDK), compile, and run Java programs on Windows, Linux, and macOS. It includes instructions for command-line usage as well as optional usage of Integrated Development Environments (IDEs).

SAMPLE JAVA PROGRAM

```java
public class MyProg {

    public static void main(String[] a) {

        System.out.println("Hello World!");

    }

}
```

1. WINDOWS

1. Install Java (JDK)

• Download the JDK from: https://www.oracle.com/java/technologies/downloads

• Install it and verify installation with:

```
java -version
```

2. Set Environment Variable (if needed)

• Add the JDK's 'bin' folder to the PATH variable:

  Control Panel > System > Advanced system settings > Environment Variables > Path > Edit

3. Save and Compile Java File

```
javac MyProg.java

java MyProg
```

2. LINUX

1. Install Java (JDK)

```
# Debian/Ubuntu

sudo apt update

sudo apt install default-jdk


# Fedora

sudo dnf install java-latest-openjdk
```

2. Compile and Run Java File

```
javac MyProg.java

java MyProg
```

3. MACOS

1. Install Java (JDK)

```
# Using Homebrew

brew install openjdk
```

2. Compile and Run Java File

```
javac MyProg.java

java MyProg
```

OPTIONAL: USING AN IDE (ALL PLATFORMS)

You can use IDEs like IntelliJ IDEA, Eclipse, NetBeans, BlueJ or Visual Studio Code (with Extension Pack for Java "by Microsoft") editor. These tools simplify writing, compiling, and running Java programs.