

# Practical: Installation of Java on Unix/Linux Machine (Without VirtualBox)

■ This guide uses WSL (Windows Subsystem for Linux) to simulate a Linux environment directly on Windows.

## Step 1: Enable WSL

1. Open PowerShell as Administrator
2. Run the following command:  
`wsl --install`
3. Restart your computer when prompted.
4. After restart, choose Ubuntu or install it from the Microsoft Store.

## Step 2: Open Ubuntu (WSL)

- Search for 'Ubuntu' in Start Menu and open it.
- It will initialize and ask for a username and password.

## Step 3: Update the Package List

Run the following command:

```
sudo apt update
```

## Step 4: Install Java (OpenJDK 8 or 11)

- For Java 8:

```
sudo apt install openjdk-8-jdk -y
```

- For Java 11:

```
sudo apt install openjdk-11-jdk -y
```

## Step 5: Verify Java Installation

Run:

```
java -version
```

Expected output:

```
openjdk version "1.8.0_xxx" ...
```

## Step 6: Set JAVA\_HOME Environment Variable (Optional)

1. Open .bashrc file:

```
nano ~/.bashrc
```

2. Add the following lines at the end:

```
export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64
```

```
export PATH=$JAVA_HOME/bin:$PATH
```

3. Save and exit (Ctrl+X, then Y, then Enter)

4. Reload bashrc:

```
source ~/.bashrc
```

5. Verify JAVA\_HOME is set:

```
echo $JAVA_HOME
```

■ You now have Java installed on a Linux system simulated within Windows without using VirtualBox!