

PRACTICAL – 01

AIM : Installation of java on Unix/Linux Machine (without using VirtualBox).

PROCEDURE :

Step 1: Enable WSL(Windows Subsystem for Linux)

- Open PowerShell as Administrator
- Run the following command:

```
ws1 -install
```

- Restart your computer when prompted. 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:

```
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 :

```
java -version
```

```
aman@AmanSemwal:~$ java -version
openjdk version "1.8.0_462"
OpenJDK Runtime Environment (build 1.8.0_462-8u462-ga~us1-0ubuntu2~24.04.2-b08)
OpenJDK 64-Bit Server VM (build 25.462-b08, mixed mode)
aman@AmanSemwal:~$ |
```

Step 6: Set JAVA_HOME Environment Variable (Optional)

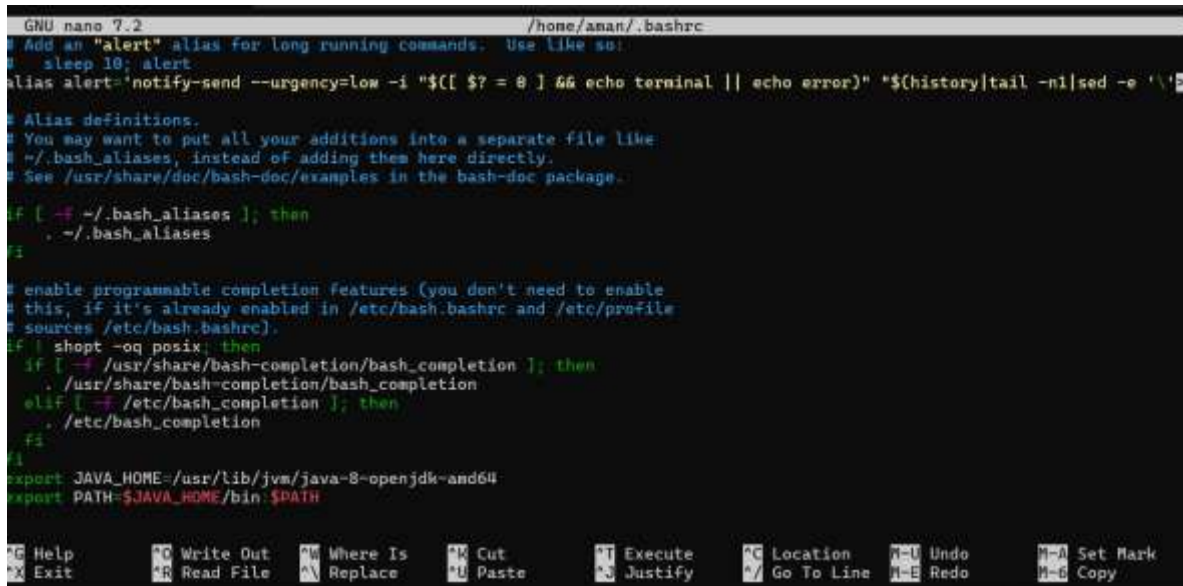
- Open .bashrc file:

```
nano ~/.bashrc
```

- Add the following lines at the end:

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

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



```
GNU nano 7.2 /home/aman/.bashrc
# Add an "alert" alias for long running commands.  Use like so:
# sleep 10; alert
alias alert='notify-send --urgency=low -i "${[ $? = 0 ]} && echo terminal || echo error)" "${history|tail -n1|sed -e '\s'
# Alias definitions.
# You may want to put all your additions into a separate file like
# ~/.bash_aliases, instead of adding them here directly.
# See /usr/share/doc/bash-doc/examples in the bash-doc package.

if [ -f ~/.bash_aliases ]; then
    . ~/.bash_aliases
fi

# enable programmable completion features (you don't need to enable
# this, if it's already enabled in /etc/bash.bashrc and /etc/profile
# sources /etc/bash.bashrc).
if ! shopt -oq posix; then
    if [ -f /usr/share/bash-completion/bash_completion ]; then
        . /usr/share/bash-completion/bash_completion
    elif [ -f /etc/bash_completion ]; then
        . /etc/bash_completion
    fi
fi

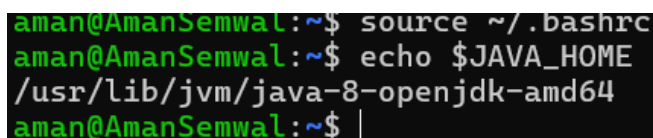
export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64
export PATH=$JAVA_HOME/bin:$PATH
```

- Save and exit (Ctrl+X, then Y, then Enter)
- Reload bashrc:

```
source ~/.bashrc
```

- Verify JAVA_HOME is set:

```
echo $JAVA_HOME
```



```
aman@AmanSemwal:~$ source ~/.bashrc
aman@AmanSemwal:~$ echo $JAVA_HOME
/usr/lib/jvm/java-8-openjdk-amd64
aman@AmanSemwal:~$ |
```