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

```
To run a command as administrator (user "root"), use "sudo <command>".

See "man sudo_root" for details.

anchal_19@LAPTOP-OUB52EE3:~$ sudo apt update
[sudo] password for anchal_19:

Get:1 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]

Hit:2 http://archive.ubuntu.com/ubuntu noble InRelease

Get:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]

Get:4 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [21.6 kB]

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Get:14 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [4288 B]

Get:15 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]

Get:16 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]

Get:17 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]

Get:18 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]

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Get:20 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]

Get:21 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [1120 kB]
```

```
Reading package lists... Done
Reading state information... Done
Reading state information... Done
The following additional packages will be installed:
    alsa-topology-conf alsa-ucm-conf ca-certificates-java fonts-dejavu-extra java-common libasound2-data libasound2t64 lib
    atk-wrapper-java
    libatk-wrapper-java-jni libgif7 libice-dev libice6 libnspr4 libnss3 libpcsclite1 libpthread-stubs0-dev libsm-dev libsm
    6 libx11-dev libxau-dev libxaw7
    libxcb-shape0 libxcbl-dev libxdmcp-dev libxft2 libxkbfile1 libxmu6 libxpm4 libxt-dev libxt6t64 libxv1 libxxf86dga1 ope
    njdk-11-jdk-headless
    openjdk-11-jre openjdk-11-jre-headless x11-utils x11proto-dev xorg-sgml-doctools xtrans-dev
Suggested packages:
    default-jre alsa-utils libasound2-plugins libice-doc pcscd libsm-doc libx11-doc libxcb-doc libxt-doc openjdk-11-demo o
    penjdk-11-source visualvm
    libnss-mdns fonts-ipafont-gothic fonts-ipafont-mincho fonts-wqy-microhei | fonts-wqy-zenhei fonts-indic mesa-utils
    Recommended packages:
    luit
The following NEW packages will be installed:
    alsa-topology-conf alsa-ucm-conf ca-certificates-java fonts-dejavu-extra java-common libasound2-data libasound2t64 lib
    atk-wrapper-java
    libatk-wrapper-java-jni libgif7 libice-dev libice6 libnspr4 libnss3 libpcsclite1 libpthread-stubs0-dev libsm-dev libsm
    6 libx11-dev libxau-dev libxaw7
    libxcb-shape0 libxcb-ldev libxaw7
    libxcb-shape0 libxcb-ldev libxaw6 libxft2 libxkbfile1 libxmu6 libxpm4 libxt-dev libxt6t64 libxv1 libxxf86dga1 ope
    njdk-11-jdk
    openjdk-11-jdk-headless openjdk-11-jre openjdk-11-jre-headless x11-utils x11proto-dev xorg-sgml-doctools xtrans-dev
    0 upgraded, 40 newly installed, 0 to remove and 0 not upgraded.
Need to get 125 MB of archives.
```

```
anchal_19@LAPTOP-OUB52EE3:~$ java -version
openjdk version "11.0.28" 2025-07-15
OpenJDK Runtime Environment (build 11.0.28+6-post-Ubuntu-1ubuntu124.04.1)
OpenJDK 64-Bit Server VM (build 11.0.28+6-post-Ubuntu-1ubuntu124.04.1, mixed mode, sharing)
anchal_19@LAPTOP-OUB52EE3:~$
```