EXP NO:6   **DATE:**

INSTALLATION OF HIVE WITH PRACTICE EXAMPLES

AIM: To install Hive on Windows operationg systrem with practice examples.

STEPS:

STEP 1: Install Apache Derby from the official derby website

https://db.apache.org/derby/derby_downloads.html according to your Java Version

Installed on your system.

STEP 2: Install Apache Hive 3.1.2 version from the official website

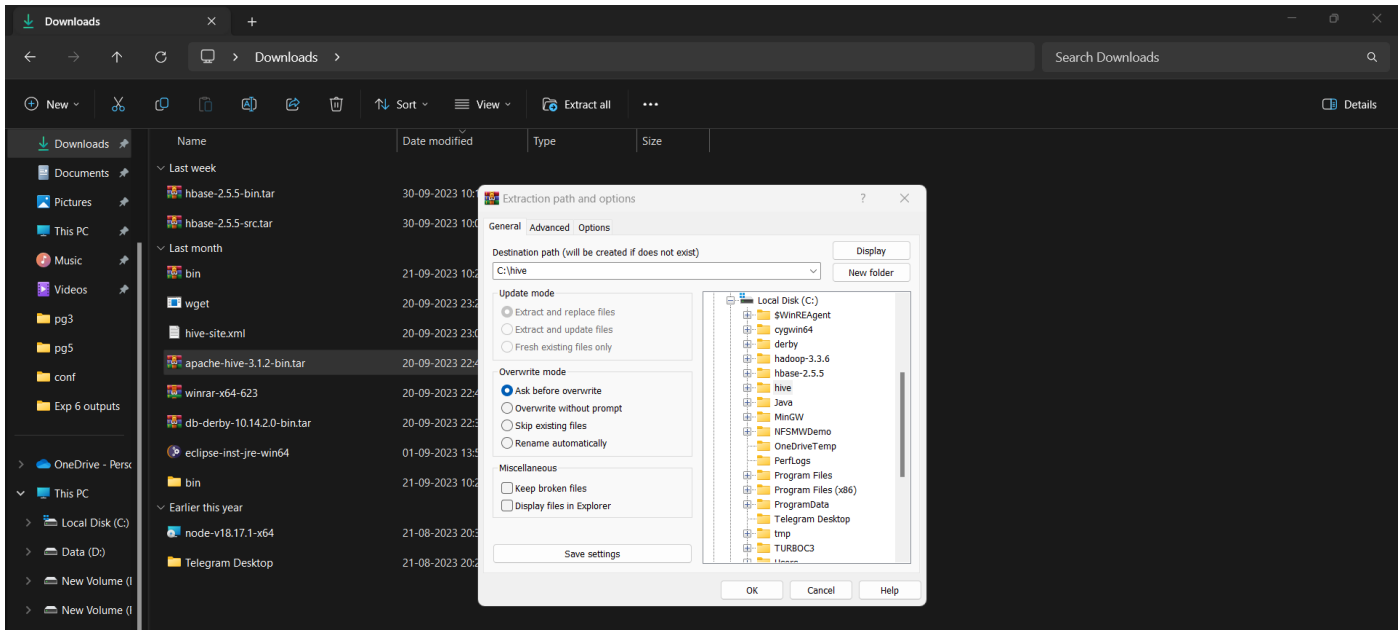https://downloads.apache.org/hive/hive-3.1.2/

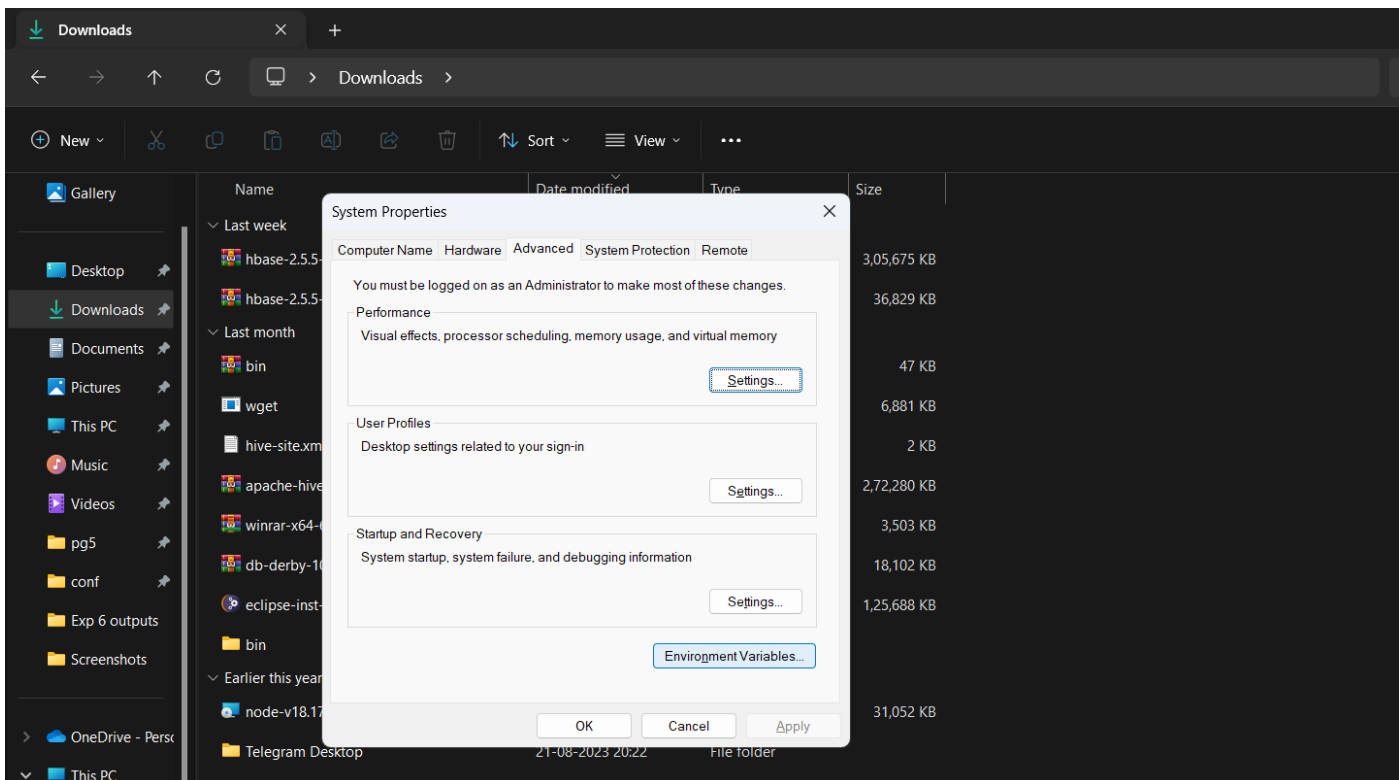**STEP 3:** Create two new folders with name **Hive** and **Derby** in **C:** folder

STEP 4: Extract the downloaded **Derby file** to newly created **Derby folder** in **C:** directory
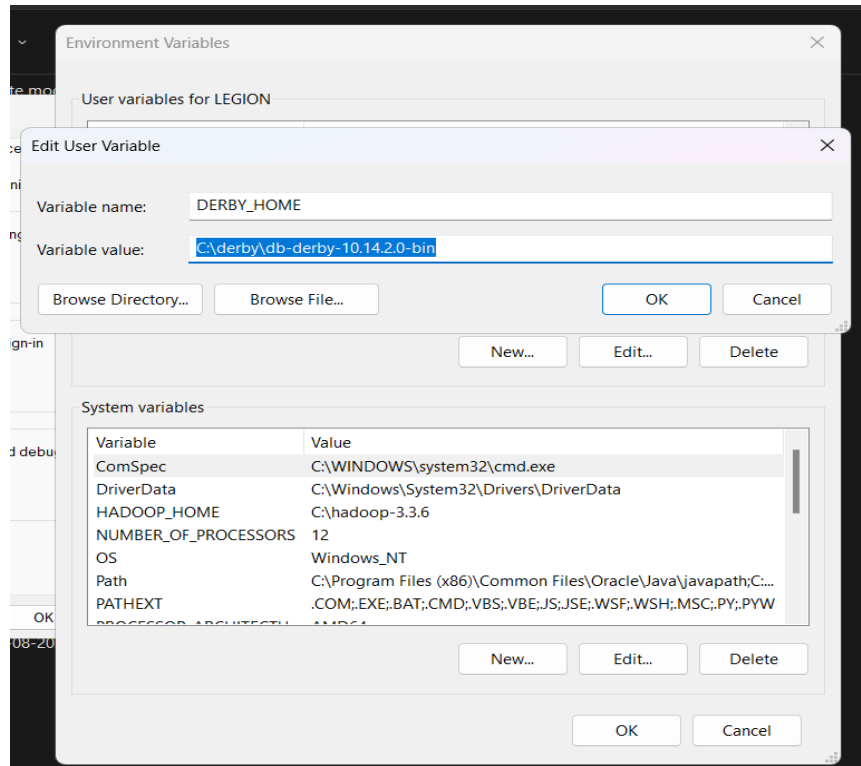
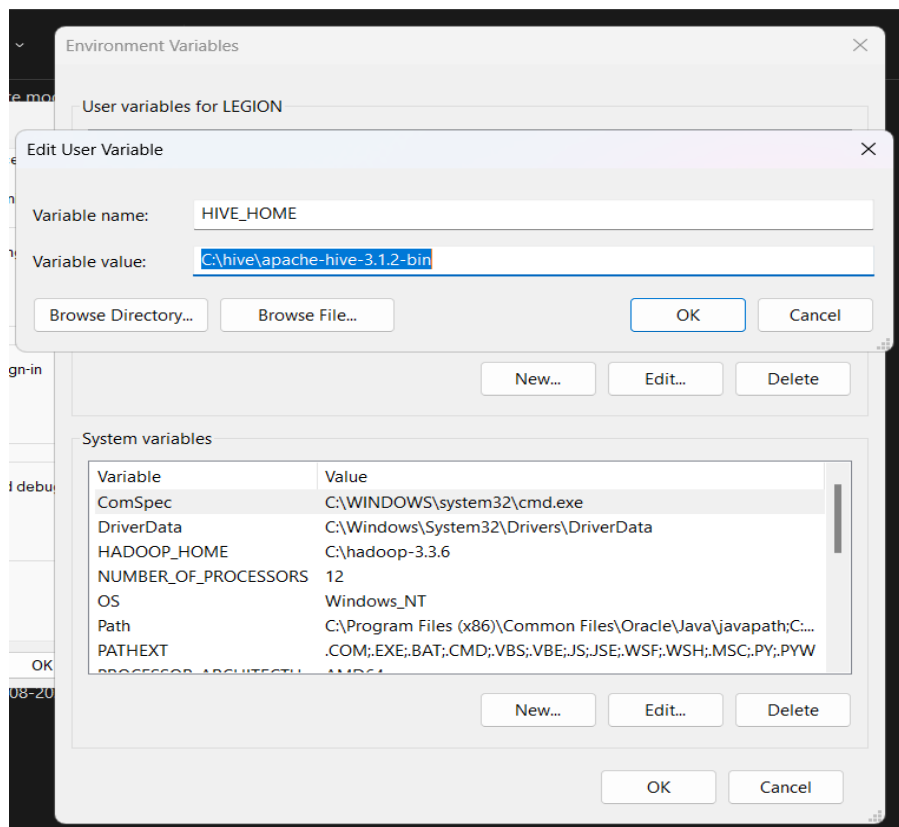**STEP 5:** Extract the downloaded **Hive file** to newly created **Hive folder** in **C:** directory.
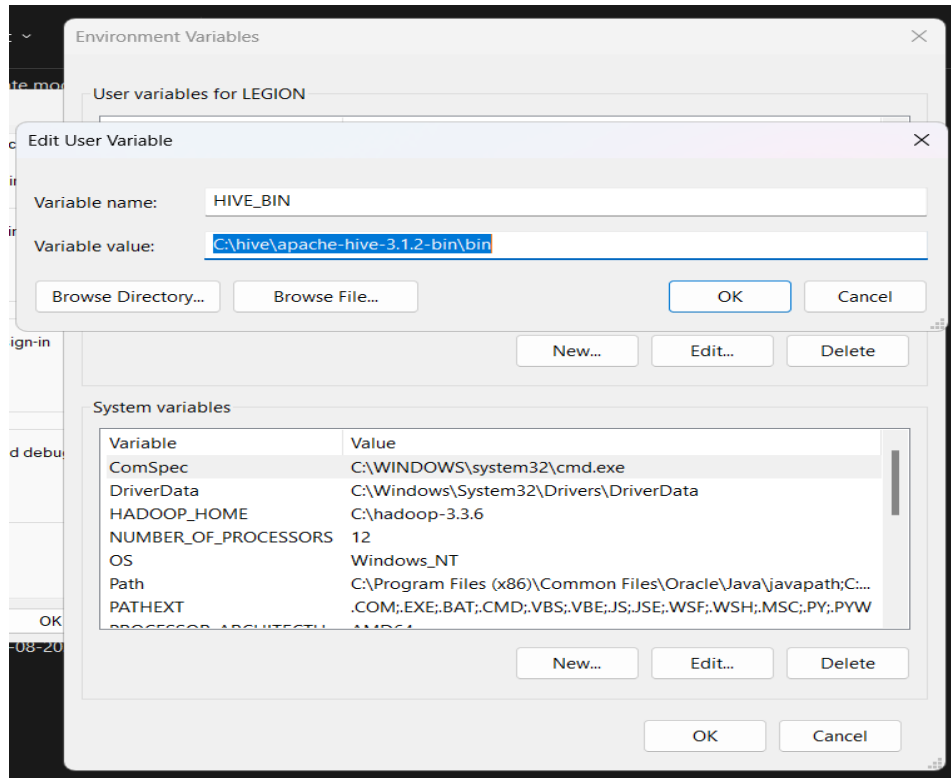

STEP 6: Now edit the Environment Variables.

STEP 7: Create a new User Variable with **Variable Name: DERBY_HOME**

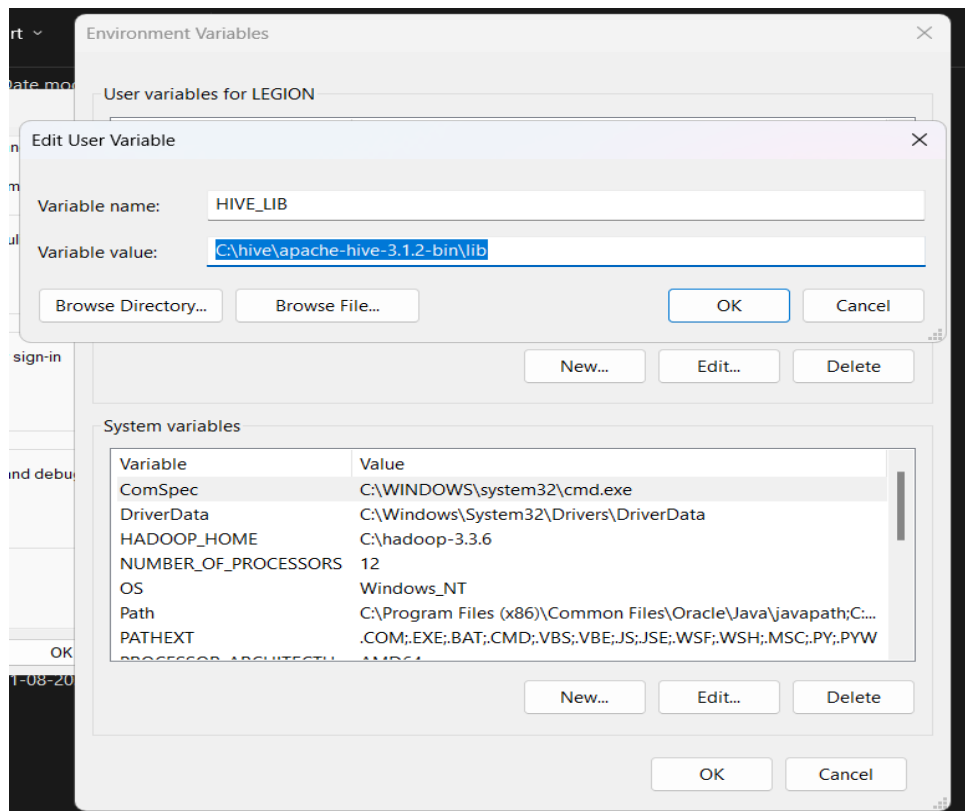and with **Variable Value: C:\derby\db-derby-10.14.2.0-bin**

STEP 8: Create a new User Variable with **Variable Name: HIVE_HOME**

and with **Variable Value: C:\hive\apache-hive-3.1.2-bin**

STEP 9: Create a new User Variable with **Variable Name: HIVE_BIN**

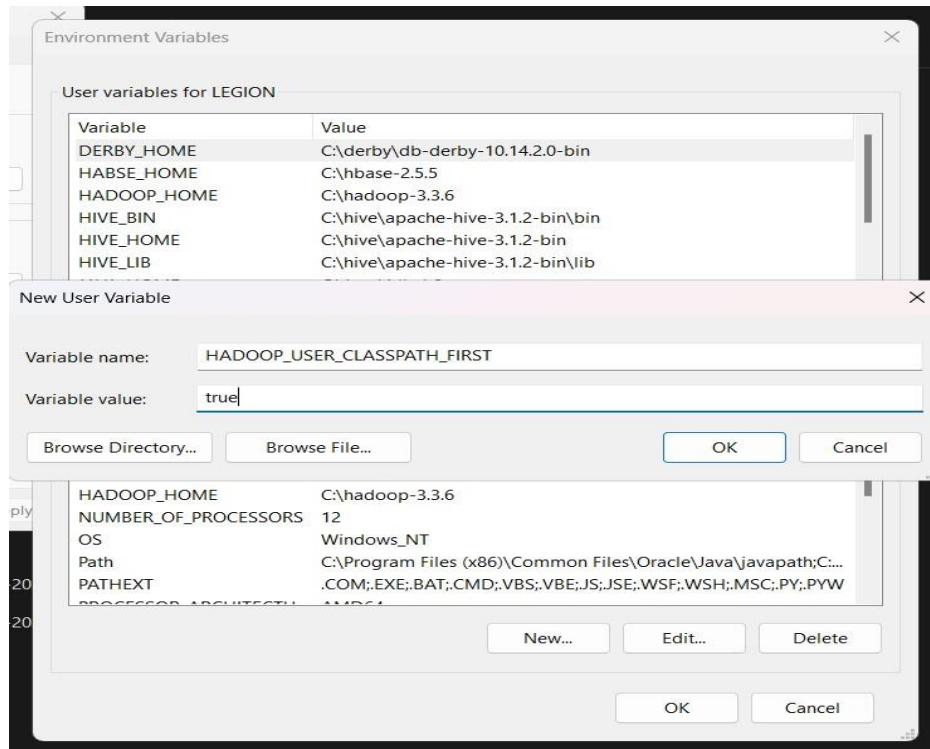and with **Variable Value: C:\hive\apache-hive-3.1.2-bin\bin**

STEP 10: Create a new User Variable with **Variable Name: HIVE_LIB**

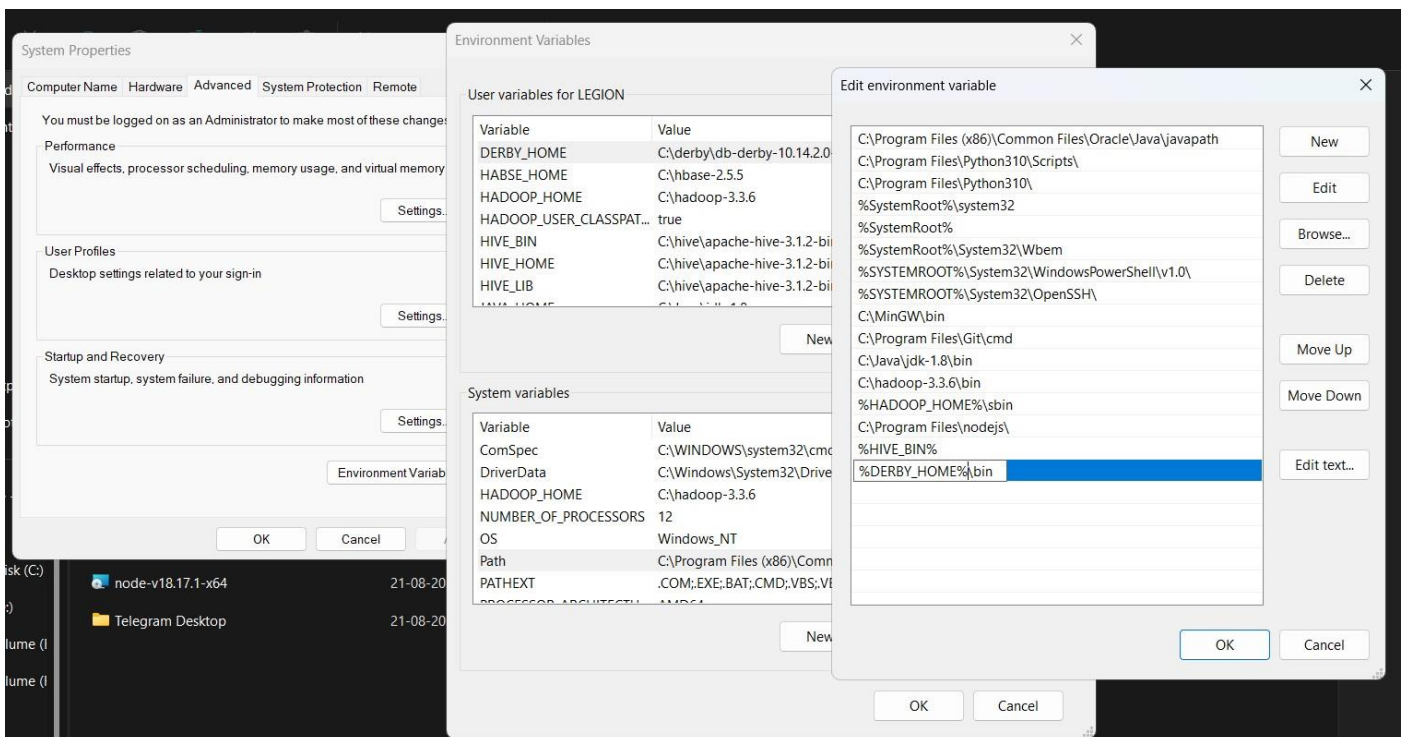and with **Variable Value: C:\hive\apache-hive-3.1.2-bin\lib**

STEP 11: Create a new User Variable with

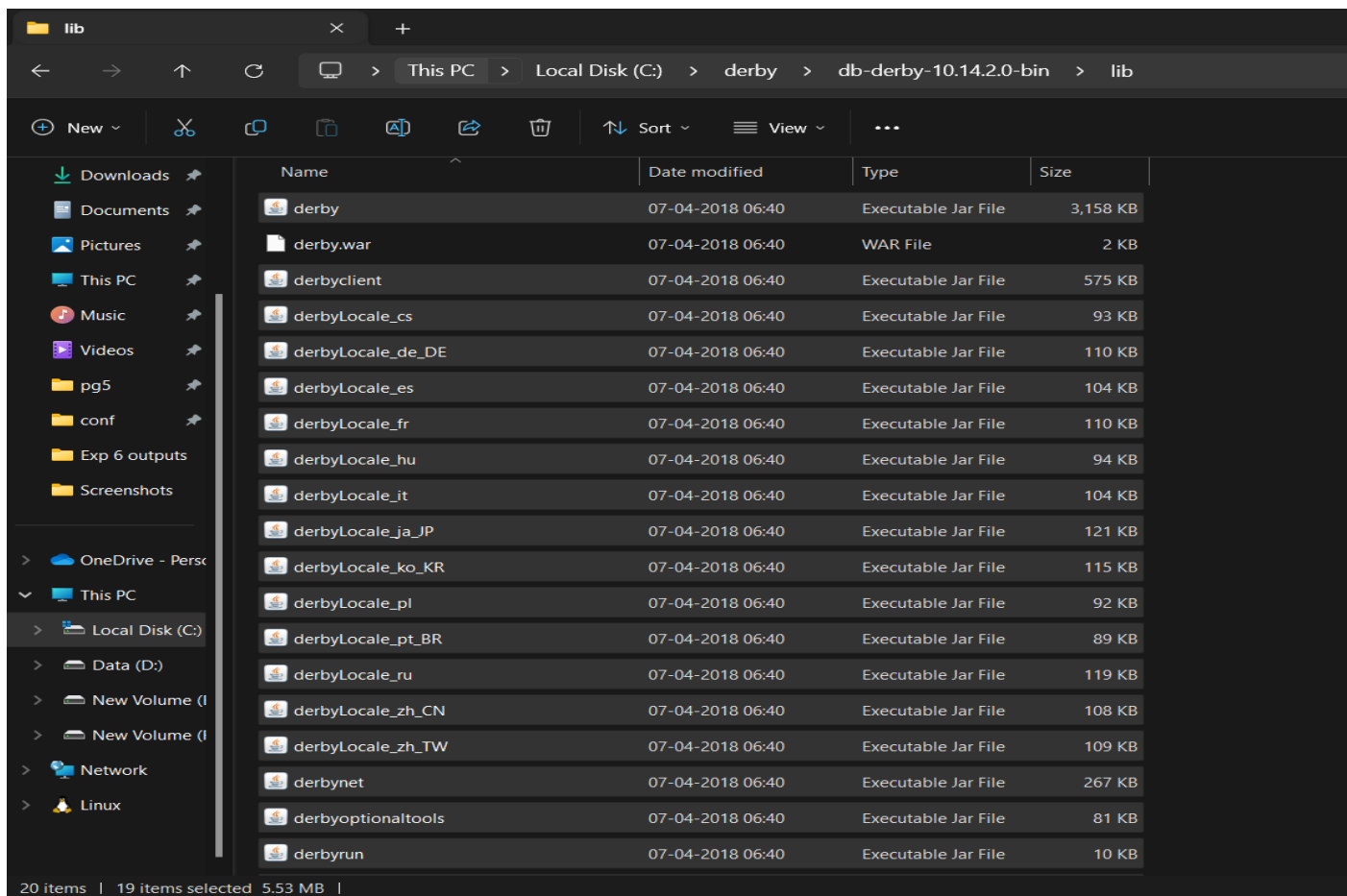   **Variable Name: HADOOP_USER_CLASSPATH_FIRST** and with
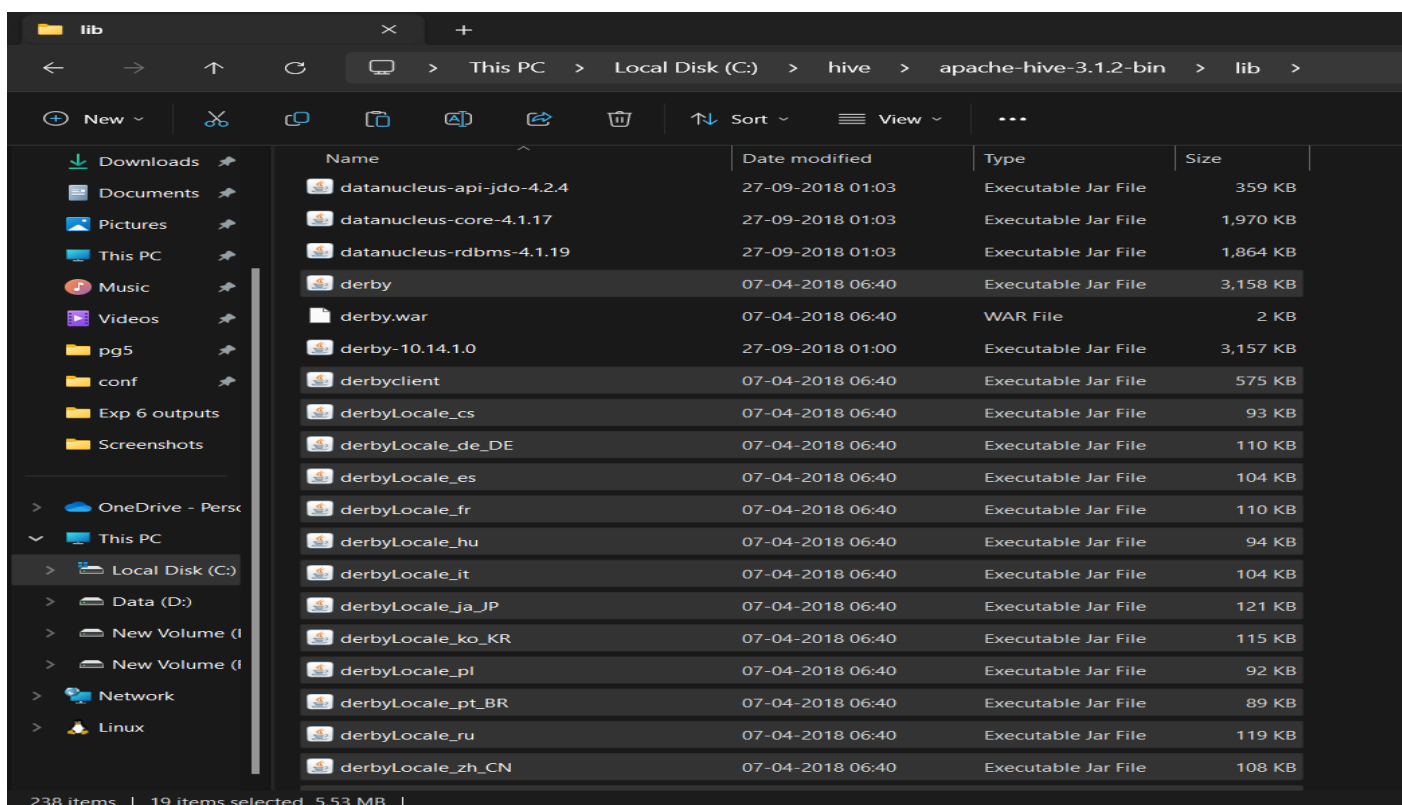
        Variable Value: true

STEP 12: Add **%HIVE_BIN%** and **%DERBY_HOME%\bin** to the **Path** of the **System Variables**.
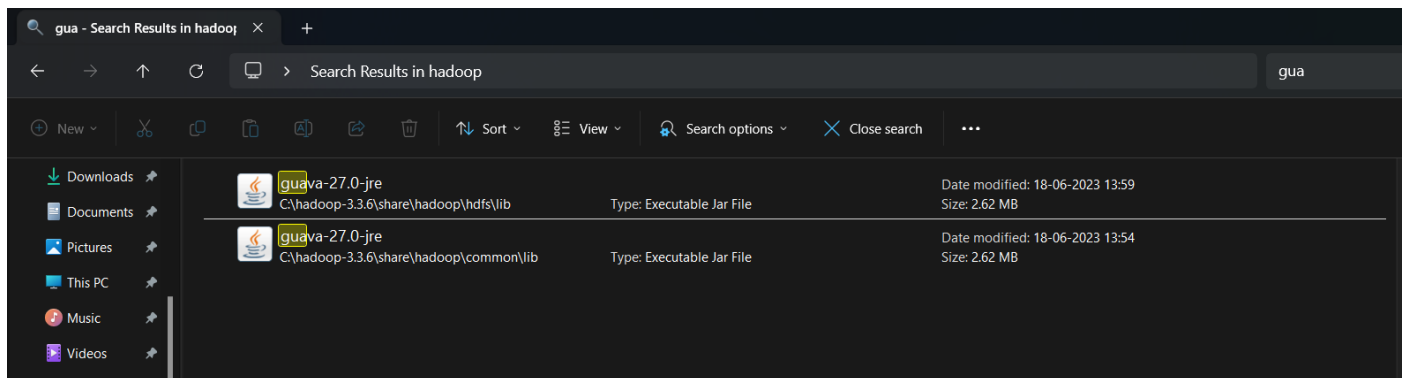
STEP 13: Copy all the **JAR Files** located in **lib** folder in **Derby** folder.
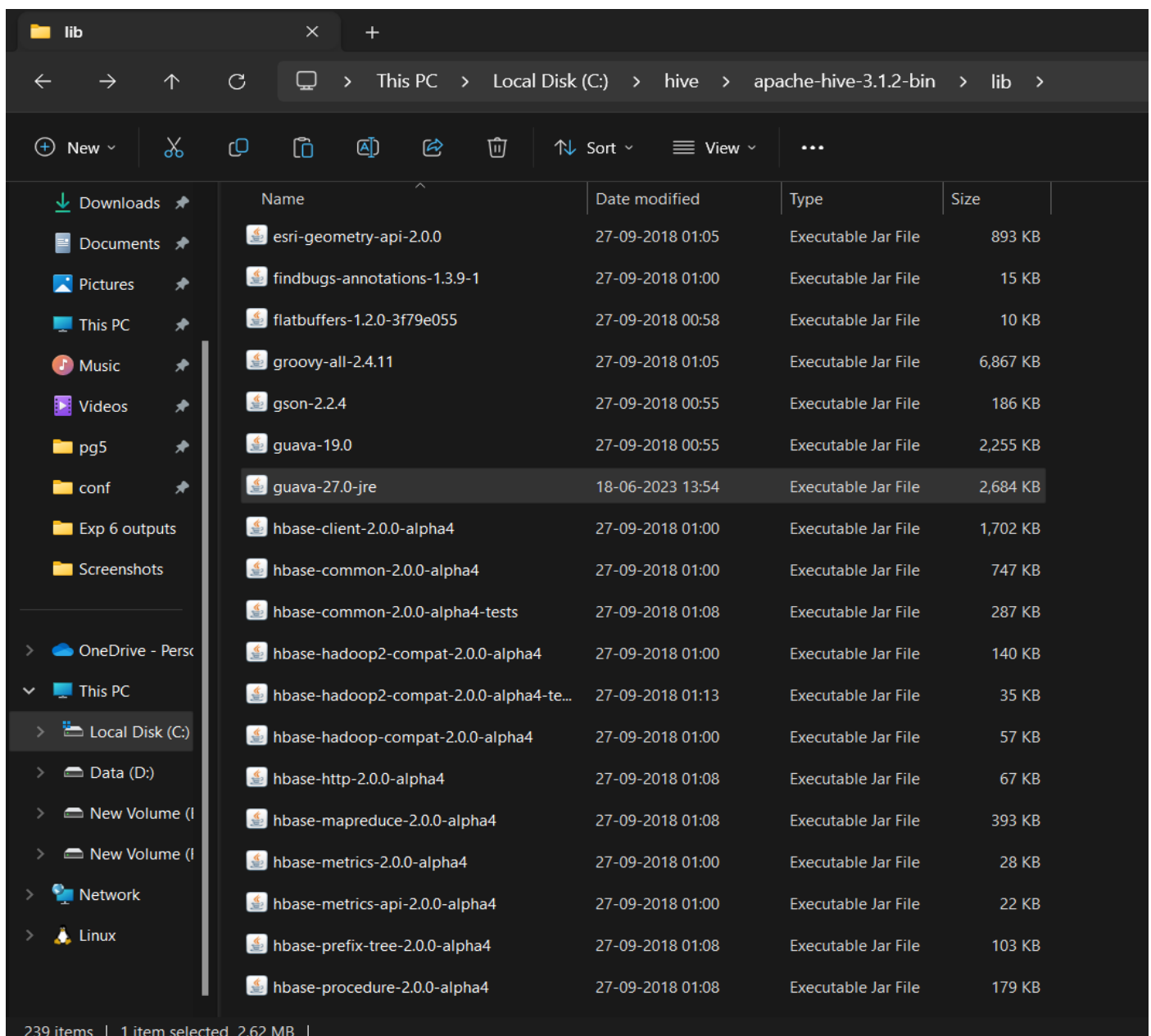

STEP 14: Paste all the **JAR Files** in **lib** folder of **Hive** folder.

STEP 15: Go to the **Hadoop** folder. Go to **share**. Go to **Hadoop**. Search for **guava.**Copy the
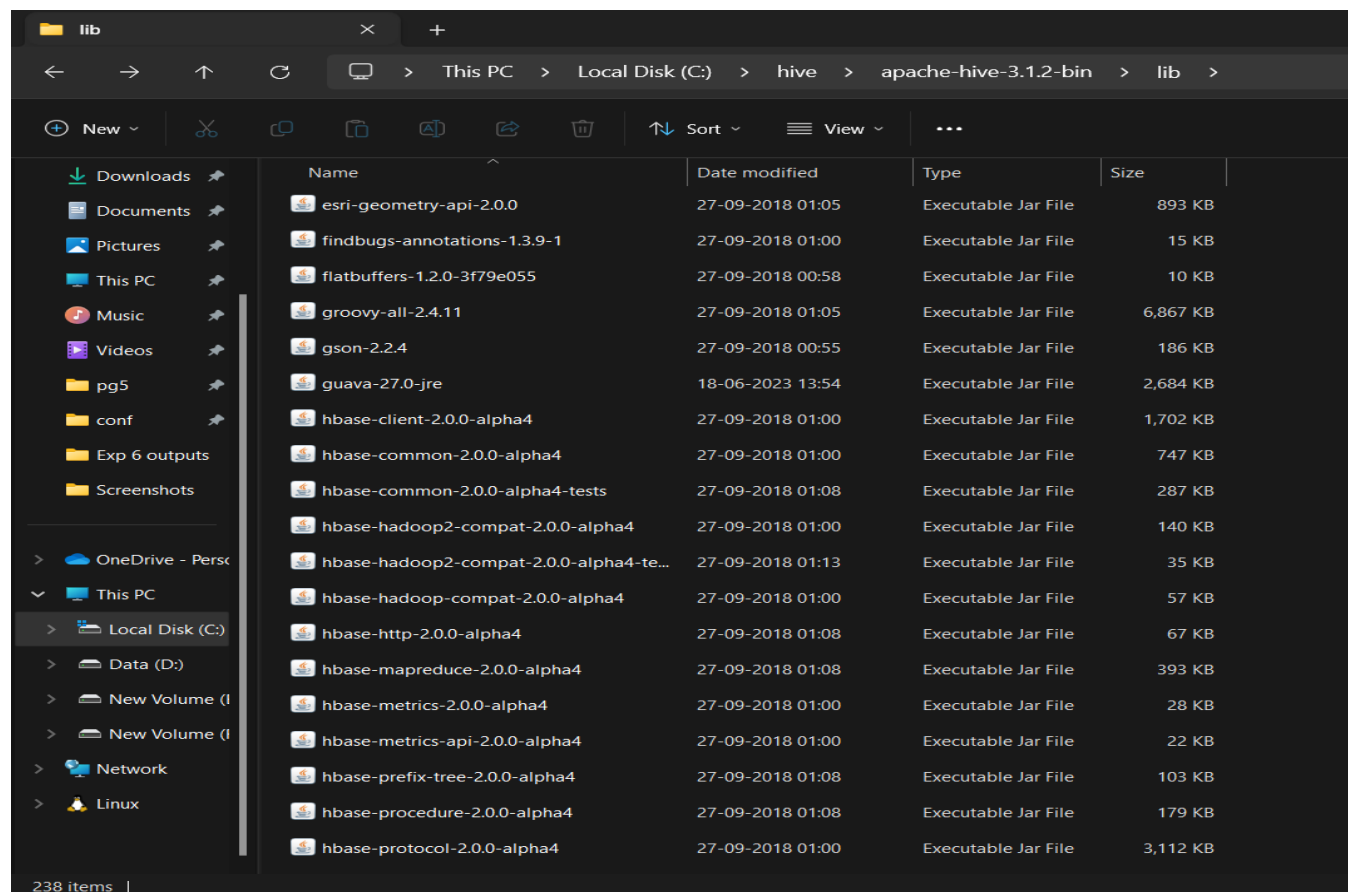
guava-27.0-jre file**.**

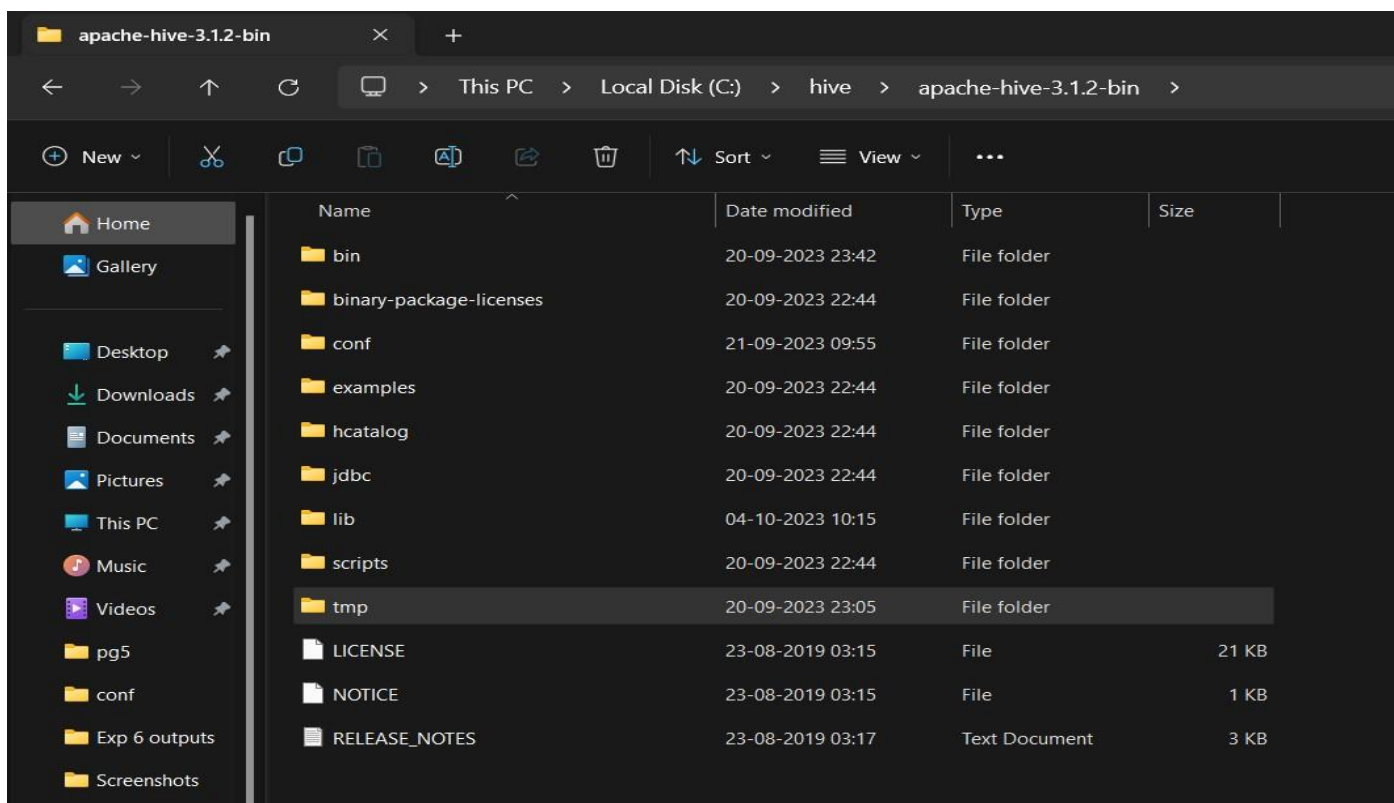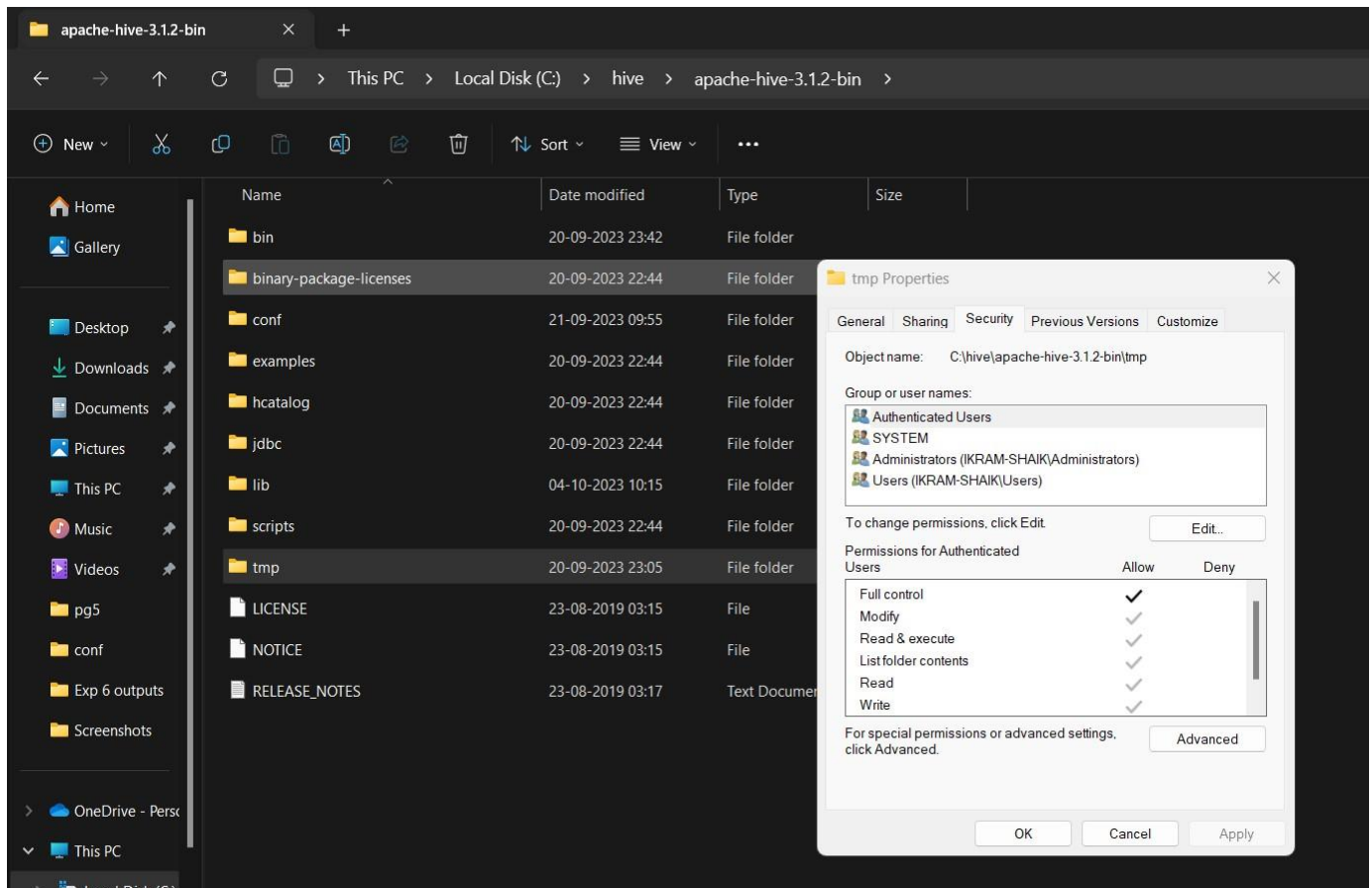**STEP 16:** Go to **lib** folder of **Hive** folder and paste the **copied guava file**.

STEP 17: Delete the **older version guava file** already present in hive folder.

STEP 18: Create a **new folder** with name **tmp** in **Hive folder**.

STEP 19: Go to **Security** in **Properties** of **tmp file** and give **all the permissions** to the tmp file.

STEP 20: Go to **conf folder** of **Hive** and create a **new file** by name **hive-site.xml** and paste the following code given below.

PROGRAM (hive-site.xml):

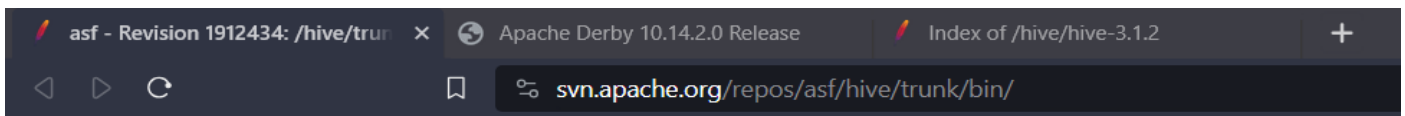<?xml version="1.0"?>

<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>

<configuration><property> <name>javax.jdo.option.ConnectionURL</name>

<value>jdbc:derby://localhost:1527/metastore_db;create=true</value>

<description>JDBC connect string for a JDBC metastore</description>

</property>

<property>

  <name>system:java.io.tmpdir</name>

  <value>C:/hive/apache-hive-3.1.2-bin/tmp</value>

</property>

<property>

  <name>system:user.name</name>

```xml
<value>${user.name}</value>
</property>
<property>
<name>javax.jdo.option.ConnectionDriverName</name>
<value>org.apache.derby.jdbc.ClientDriver</value>
<description>Driver class name for a JDBC metastore</description>
</property>
<property>
<name>hive.server2.enable.doAs</name>
<description>Enable user impersonation for HiveServer2</description>
<value>true</value>
</property>
<property>
<name>hive.server2.authentication</name>
<value>NONE</value>
<description> Client authentication types. NONE: no authentication check LDAP: LDAP/AD
 based authentication KERBEROS: Kerberos/GSSAPI authentication CUSTOM: Custom
 authentication provider (Use with property hive.server2.custom.authentication.class)
 </description>
</property>
<property>
<name>datanucleus.autoCreateTables</name>
<value>True</value>
</property>
</configuration>
```

STEP 21: The **bin file** in Hive folder is given for **Linux operating system**. We need to download **bin file** for **Windows operating system** from the official website of Hive**. https://svn.apache.org/repos/asf/hive/trunk/bin/**

asf - Revision 1912434: /hive/trunk/bin

- ..
- beeline
- beeline.cmd
- derbyserver.cmd
- ext/
- hive
- hive-config.cmd
- hive-config.sh
- hive.cmd
- hiveserver2
- init-hive-dfs.sh
- metatool
- schematool

STEP 22: To install **bin** file for **Windows Operating system** we need to install **wget** from official website **https://eternallybored.org/misc/wget/** according to your **system type**.

STEP 23: After downloading the **wget** application place it in the **C:\Windows\System32**

STEP 24: Open **Command Prompt** and run it as **Administrator** and run the following command

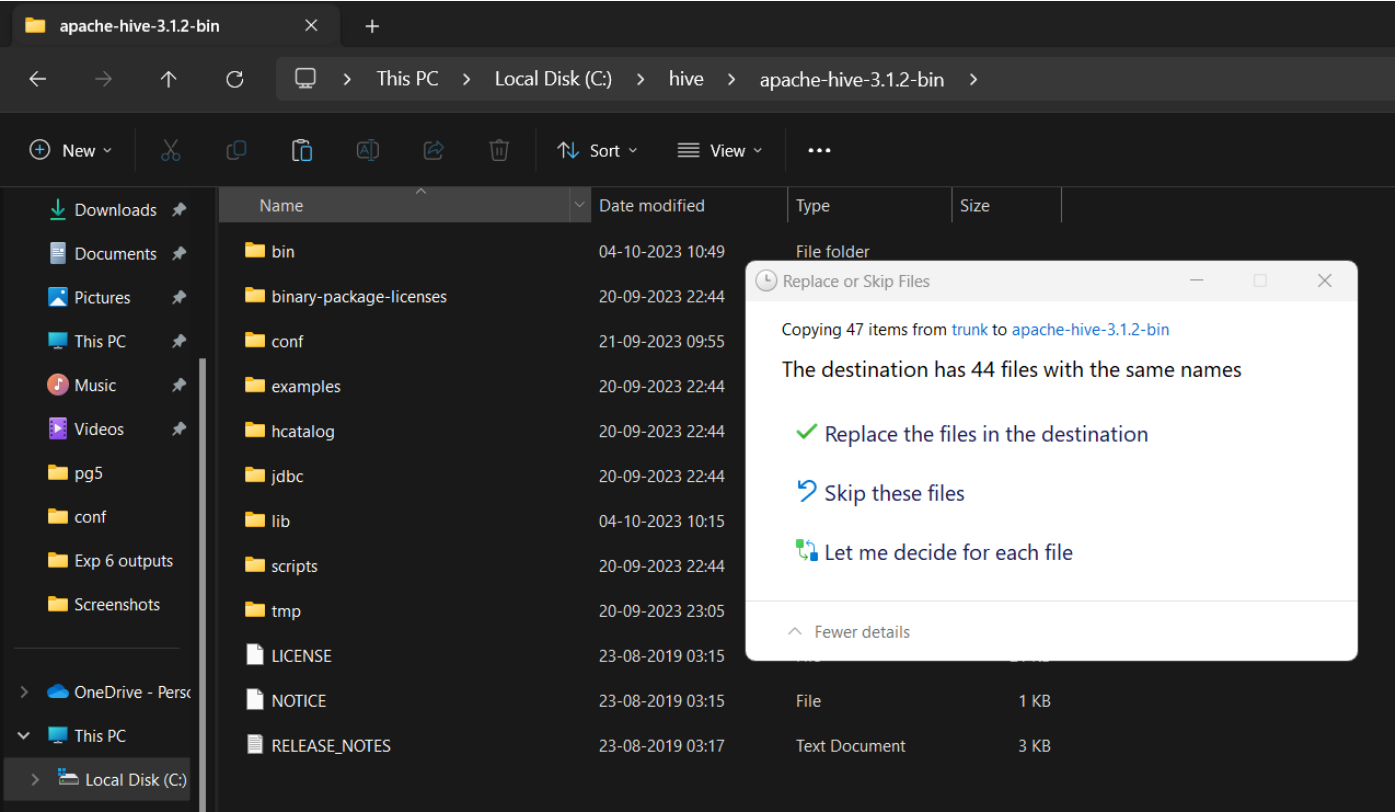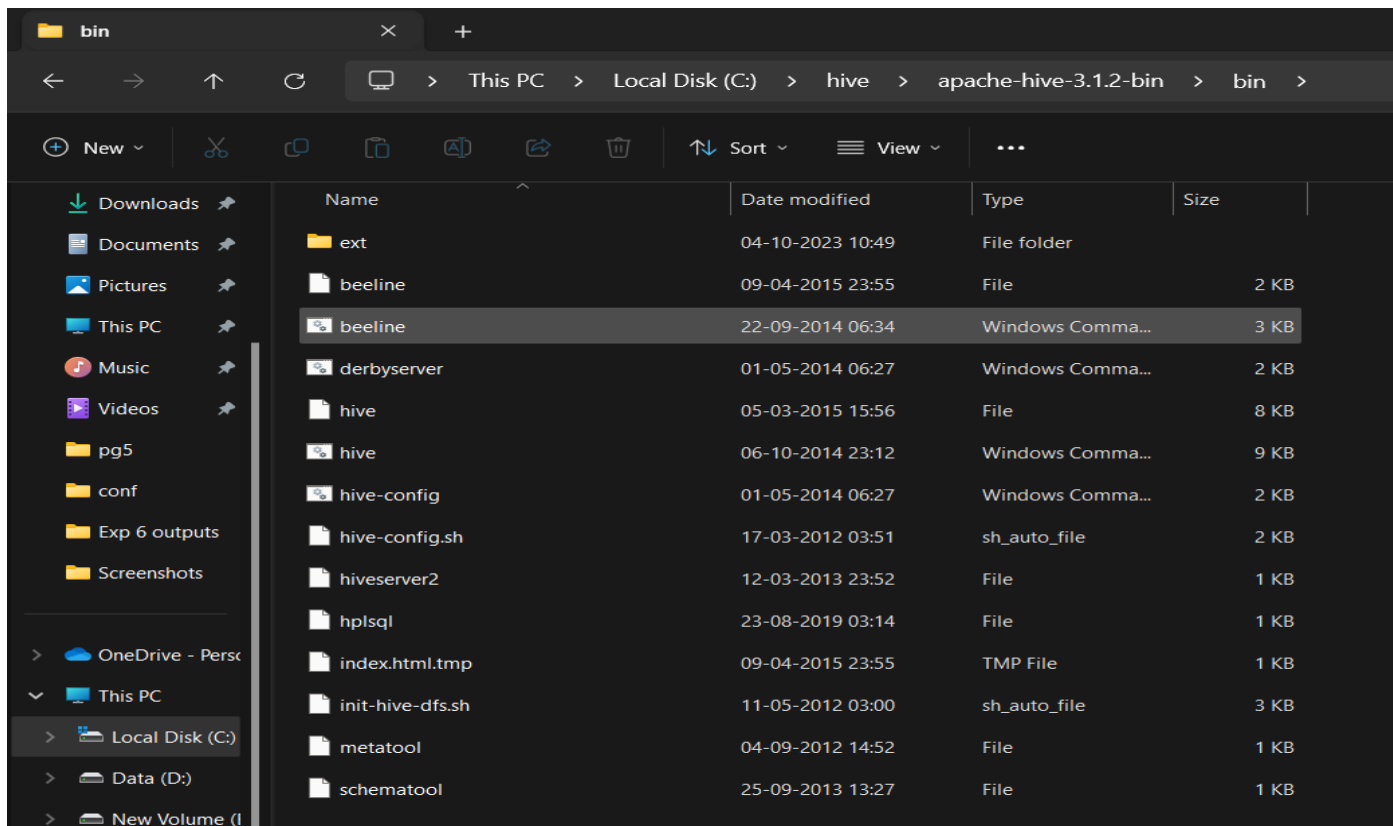**wget -r -np -nH --cut-dirs=3 -R index.html https://svn.apache.org/repos/asf/hive/trunk/bin/**

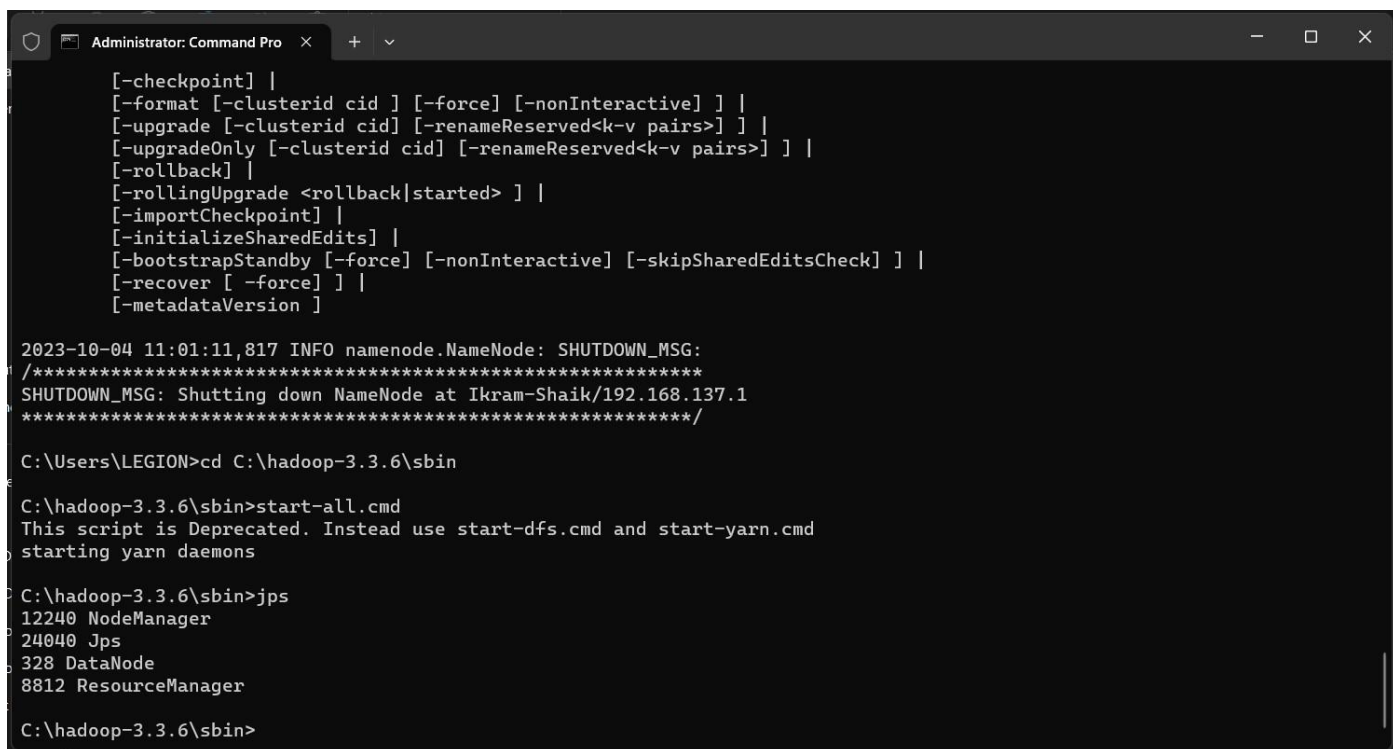**STEP 26:** After downloading **search** for the bin file and **copy** the bin file.

STEP 27: **Replace** this **bin file** with the bin file present in the **Hive directory**.

STEP 28: The **replaced bin file** consists of **Windows Community files** which not present in the **old bin file**.

STEP 30: Run **Command Prompt** as **Administartor** and **run all the demons** of Hadoop.

STEP 31: Open new command prompt and run the following command

StartNewtowrkServer -h 0.0.0.0

STEP 31: Check whether **NetworkServerControl** is ruuning or not by using **jps** command.

STEP 32: In a new **Command Prompt** run **hive** command.

RESULT: Installation of Apache Hive on a windows operating system is succesfully completed and verified.