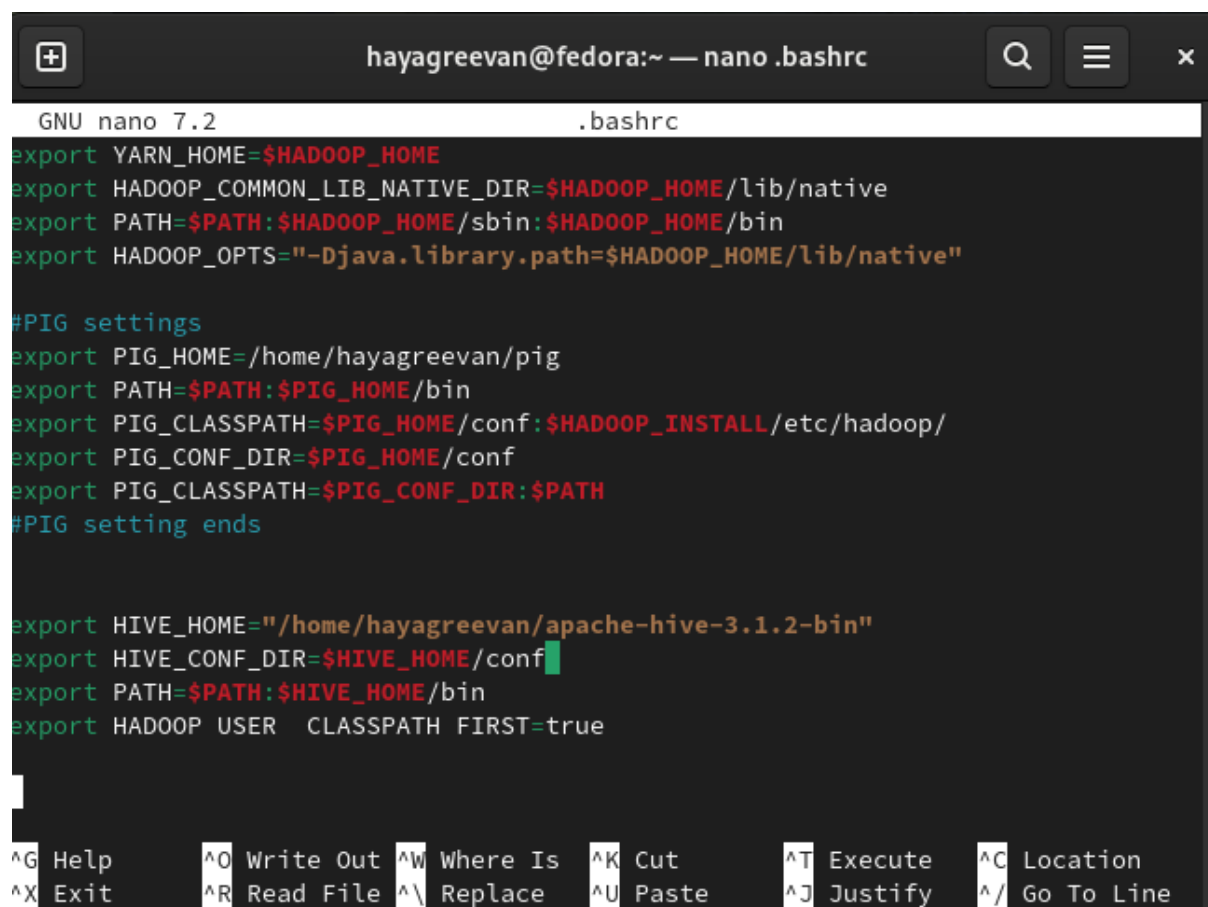


Exp. No : 5**HIVE Installation**

1. Download and Extract apache hive 3.1.2

```
hayagreevan@fedora:~$ wget https://archive.apache.org/dist/hive/hive-3.1.2/apache-hive-3.1.2-bin.tar.gz
apache-hive-3.1.2-bin 100% [=====>] 265.89M 577.10KB/s
[Files: 1 Bytes: 265.89M [468.]]
hayagreevan@fedora:~$ tar -xzf apache-hive-3.1.2-bin
```

2. Update HIVE Configurations in .bashrc



```
GNU nano 7.2 .bashrc
export YARN_HOME=$HADOOP_HOME
export HADOOP_COMMON_LIB_NATIVE_DIR=$HADOOP_HOME/lib/native
export PATH=$PATH:$HADOOP_HOME/sbin:$HADOOP_HOME/bin
export HADOOP_OPTS="-Djava.library.path=$HADOOP_HOME/lib/native"

#PIG settings
export PIG_HOME=/home/hayagreevan/pig
export PATH=$PATH:$PIG_HOME/bin
export PIG_CLASSPATH=$PIG_HOME/conf:$HADOOP_INSTALL/etc/hadoop/
export PIG_CONF_DIR=$PIG_HOME/conf
export PIG_CLASSPATH=$PIG_CONF_DIR:$PATH
#PIG setting ends

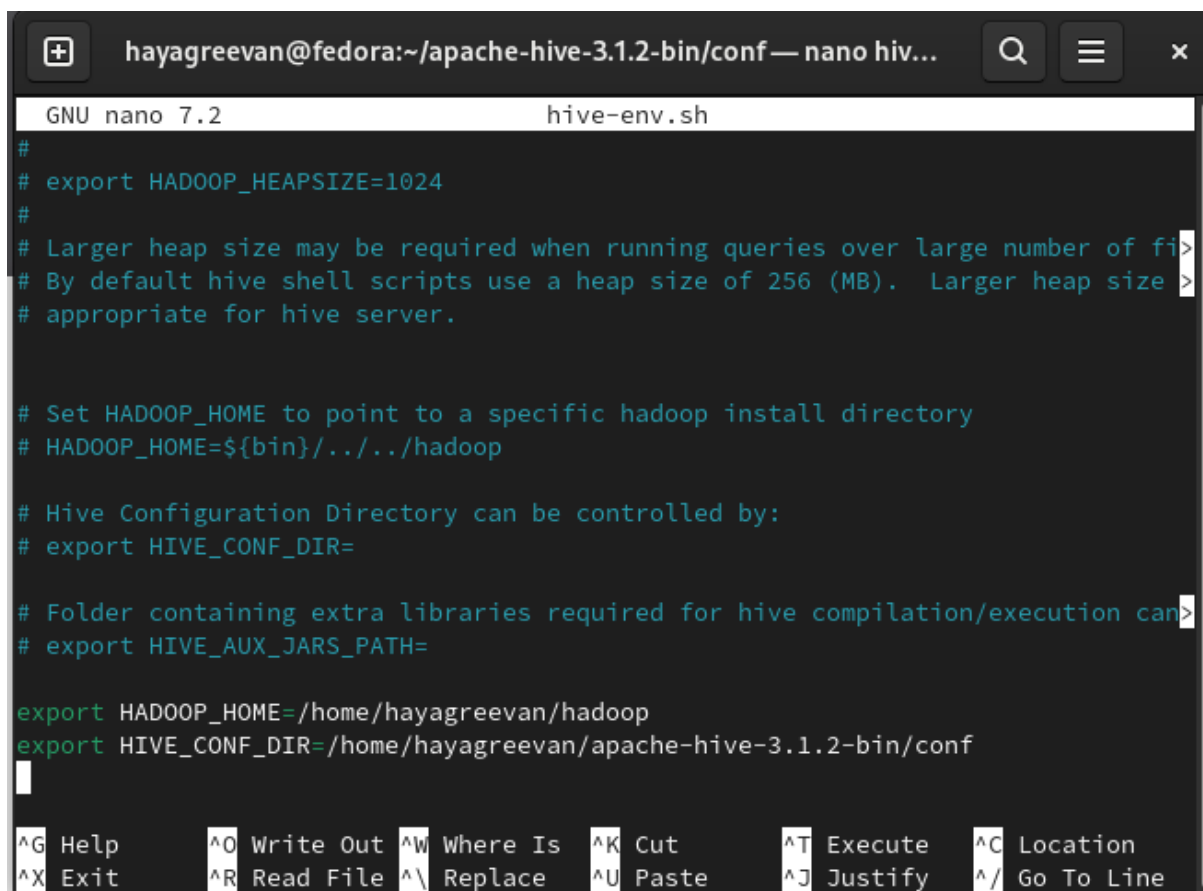
export HIVE_HOME="/home/hayagreevan/apache-hive-3.1.2-bin"
export HIVE_CONF_DIR=$HIVE_HOME/conf
export PATH=$PATH:$HIVE_HOME/bin
export HADOOP_USER_CLASSPATH_FIRST=true

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

3. Change directory to apache-hive-3.1.2-bin/conf

```
hayagreevan@fedora:~$ cd apache-hive-3.1.2-bin/conf/
hayagreevan@fedora:~/apache-hive-3.1.2-bin/conf$
```

4. Create hive-env.sh



```
GNU nano 7.2                                hive-env.sh
#
# export HADOOP_HEAPSIZE=1024
#
# Larger heap size may be required when running queries over large number of fi>
# By default hive shell scripts use a heap size of 256 (MB).  Larger heap size >
# appropriate for hive server.

# Set HADOOP_HOME to point to a specific hadoop install directory
# HADOOP_HOME=${bin}/../../hadoop

# Hive Configuration Directory can be controlled by:
# export HIVE_CONF_DIR=

# Folder containing extra libraries required for hive compilation/execution can>
# export HIVE_AUX_JARS_PATH=

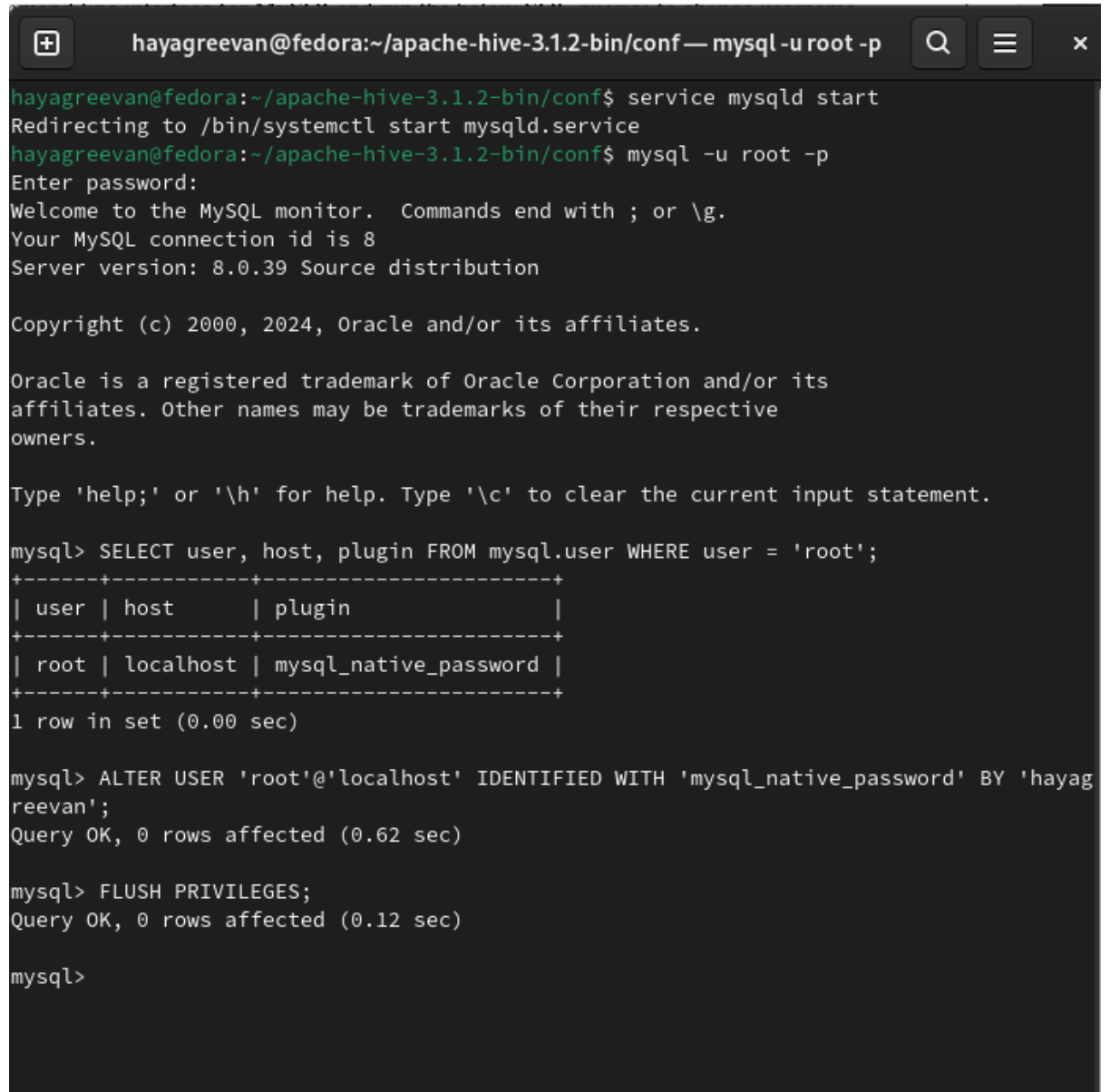
export HADOOP_HOME=/home/hayagreevan/hadoop
export HIVE_CONF_DIR=/home/hayagreevan/apache-hive-3.1.2-bin/conf

```

Shortcuts:

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location
^X Exit	^R Read File	^\ Replace	^U Paste	^J Justify	^/ Go To Line

5. Install and Change mysql root password



A terminal window titled 'hayagreevan@fedora:~/apache-hive-3.1.2-bin/conf — mysql -u root -p'. The user runs 'service mysqld start', which redirects to 'systemctl start mysqld.service'. Then, they run 'mysql -u root -p', enter a password, and are welcomed to the MySQL monitor. The user then runs a query to check the root user's plugin, followed by an ALTER USER statement to change the password to 'hayagreevan'. Finally, they run 'FLUSH PRIVILEGES;' to apply the changes.

```
hayagreevan@fedora:~/apache-hive-3.1.2-bin/conf$ service mysqld start
Redirecting to /bin/systemctl start mysqld.service
hayagreevan@fedora:~/apache-hive-3.1.2-bin/conf$ mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.39 Source distribution

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Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

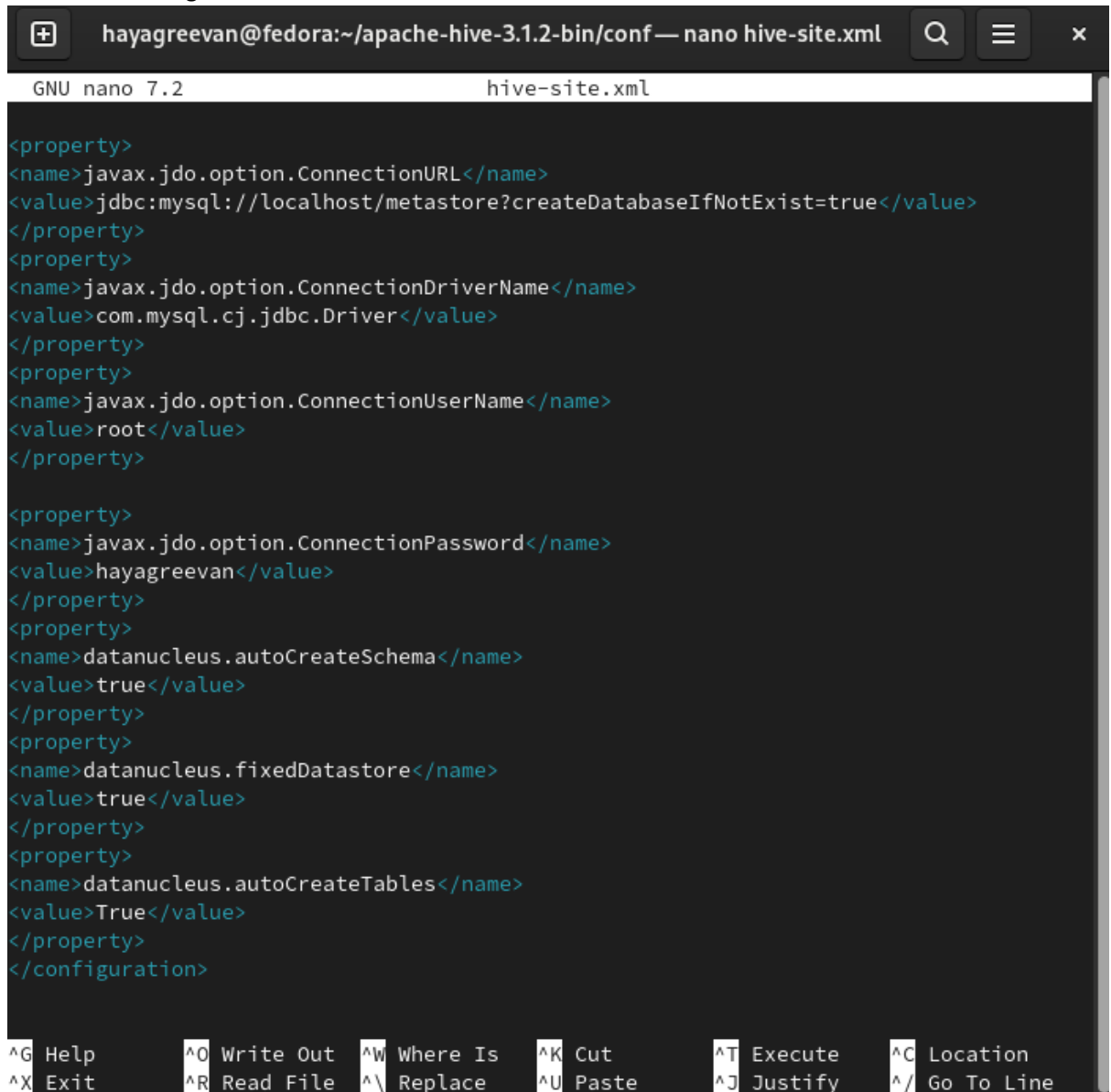
mysql> SELECT user, host, plugin FROM mysql.user WHERE user = 'root';
+-----+-----+-----+
| user | host      | plugin                |
+-----+-----+-----+
| root | localhost | mysql_native_password |
+-----+-----+-----+
1 row in set (0.00 sec)

mysql> ALTER USER 'root'@'localhost' IDENTIFIED WITH 'mysql_native_password' BY 'hayagreevan';
Query OK, 0 rows affected (0.62 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.12 sec)

mysql>
```

6. Create and configure hive-site.xml



```
GNU nano 7.2          hive-site.xml

<property>
<name>javax.jdo.option.ConnectionURL</name>
<value>jdbc:mysql://localhost/metastore?createDatabaseIfNotExist=true</value>
</property>
<property>
<name>javax.jdo.option.ConnectionDriverName</name>
<value>com.mysql.cj.jdbc.Driver</value>
</property>
<property>
<name>javax.jdo.option.ConnectionUserName</name>
<value>root</value>
</property>

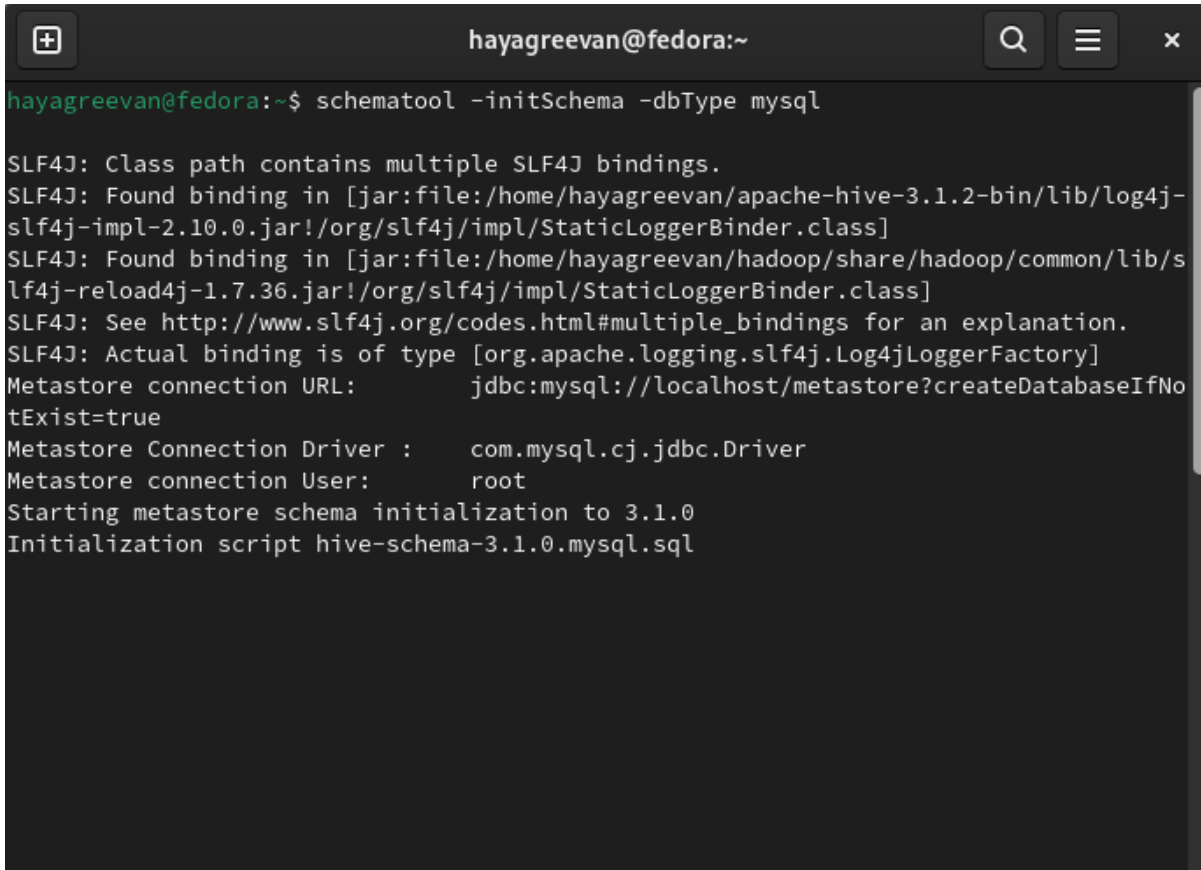
<property>
<name>javax.jdo.option.ConnectionPassword</name>
<value>hayagreevan</value>
</property>
<property>
<name>datanucleus.autoCreateSchema</name>
<value>true</value>
</property>
<property>
<name>datanucleus.fixedDatastore</name>
<value>true</value>
</property>
<property>
<name>datanucleus.autoCreateTables</name>
<value>True</value>
</property>
</configuration>

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^/ Go To Line
```

7. Download and Move mysql java connector to apache-hive-3.1.2-bin/lib

```
hayagreevan@fedora:~$ mv Downloads/mysql-connector-java-8.0.15.jar apache-hive-3.1.2-bin/lib/
```

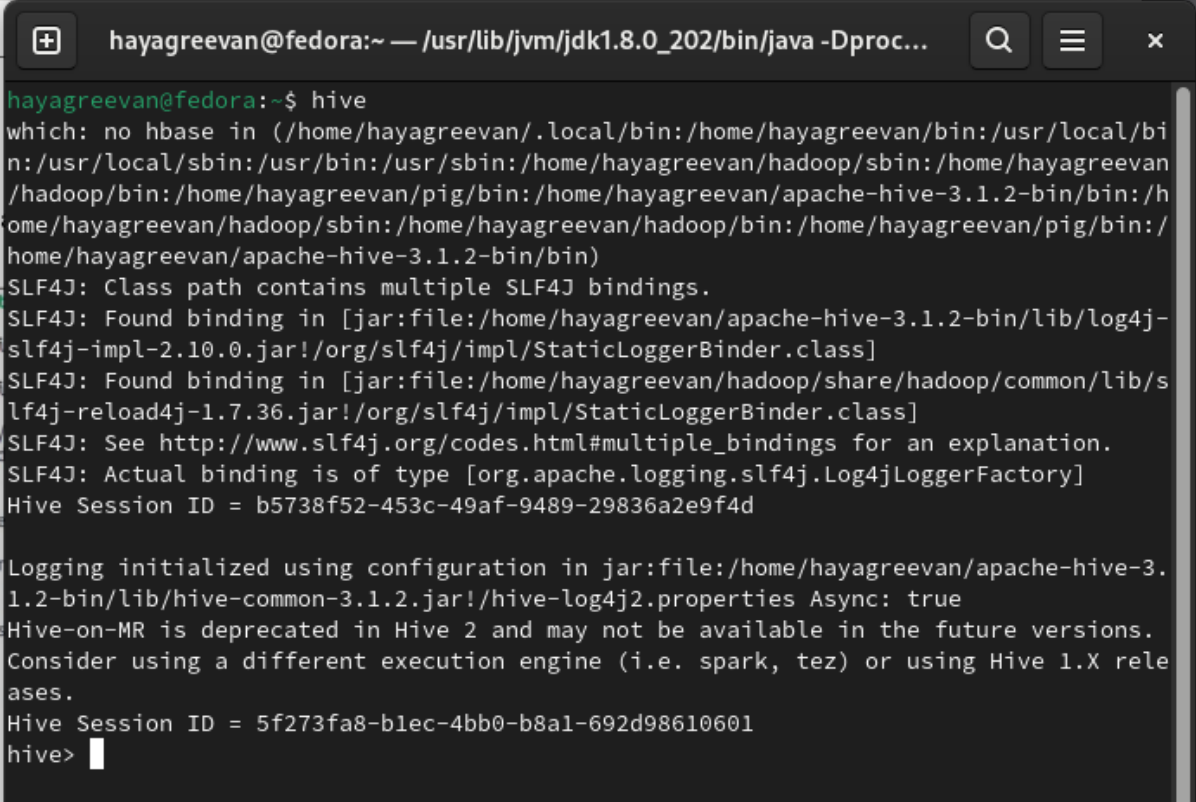
8. Execute schematool -initSchema -dbType mysql



```
hayagreevan@fedora:~$ schematool -initSchema -dbType mysql

SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/home/hayagreevan/apache-hive-3.1.2-bin/lib/log4j-slf4j-impl-2.10.0.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/home/hayagreevan/hadoop/share/hadoop/common/lib/slf4j-reload4j-1.7.36.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.apache.logging.slf4j.Log4jLoggerFactory]
Metastore connection URL:      jdbc:mysql://localhost/metastore?createDatabaseIfNotExist=true
Metastore Connection Driver :  com.mysql.cj.jdbc.Driver
Metastore connection User:    root
Starting metastore schema initialization to 3.1.0
Initialization script hive-schema-3.1.0.mysql.sql
```

9. Start hive



```
hayagreevan@fedora:~$ hive
which: no hbase in (/home/hayagreevan/.local/bin:/home/hayagreevan/bin:/usr/local/bin:/usr/local/sbin:/usr/bin:/usr/sbin:/home/hayagreevan/hadoop/sbin:/home/hayagreevan/hadoop/bin:/home/hayagreevan/pig/bin:/home/hayagreevan/apache-hive-3.1.2-bin/bin:/home/hayagreevan/hadoop/sbin:/home/hayagreevan/hadoop/bin:/home/hayagreevan/pig/bin:/home/hayagreevan/apache-hive-3.1.2-bin/bin)
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/home/hayagreevan/apache-hive-3.1.2-bin/lib/log4j-slf4j-impl-2.10.0.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/home/hayagreevan/hadoop/share/hadoop/common/lib/slf4j-reload4j-1.7.36.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.apache.logging.slf4j.Log4jLoggerFactory]
Hive Session ID = b5738f52-453c-49af-9489-29836a2e9f4d

Logging initialized using configuration in jar:file:/home/hayagreevan/apache-hive-3.1.2-bin/lib/hive-common-3.1.2.jar!/hive-log4j2.properties Async: true
Hive-on-MR is deprecated in Hive 2 and may not be available in the future versions. Consider using a different execution engine (i.e. spark, tez) or using Hive 1.X releases.
Hive Session ID = 5f273fa8-b1ec-4bb0-b8a1-692d98610601
hive>
```