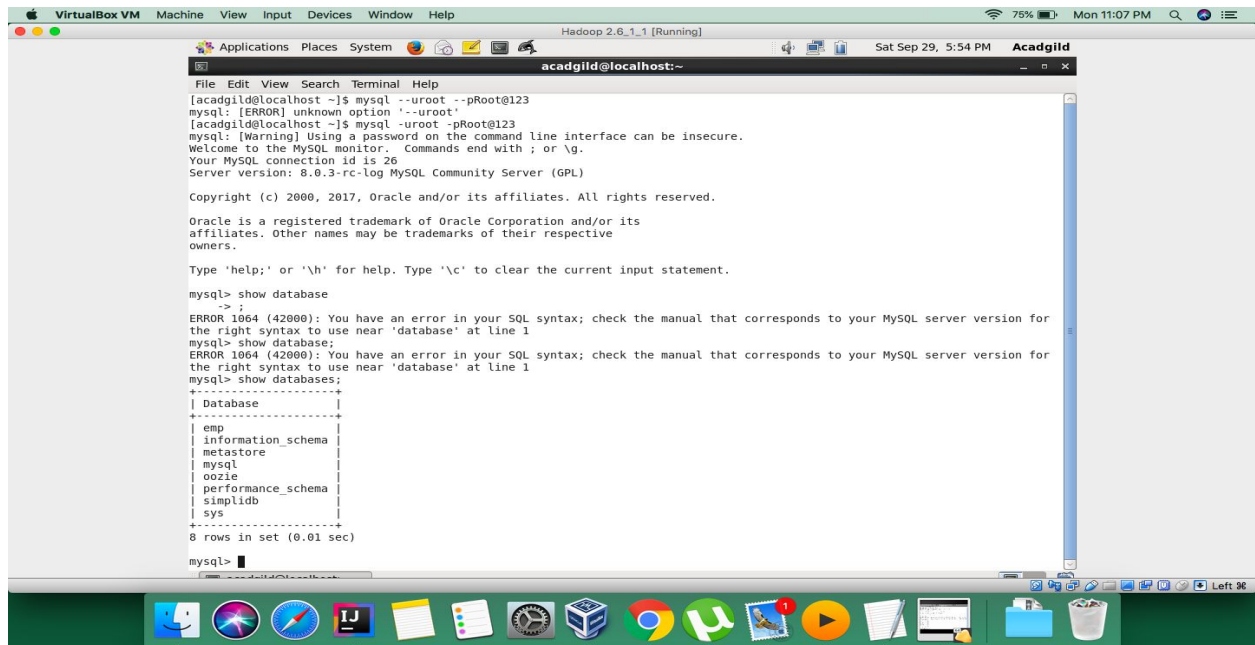
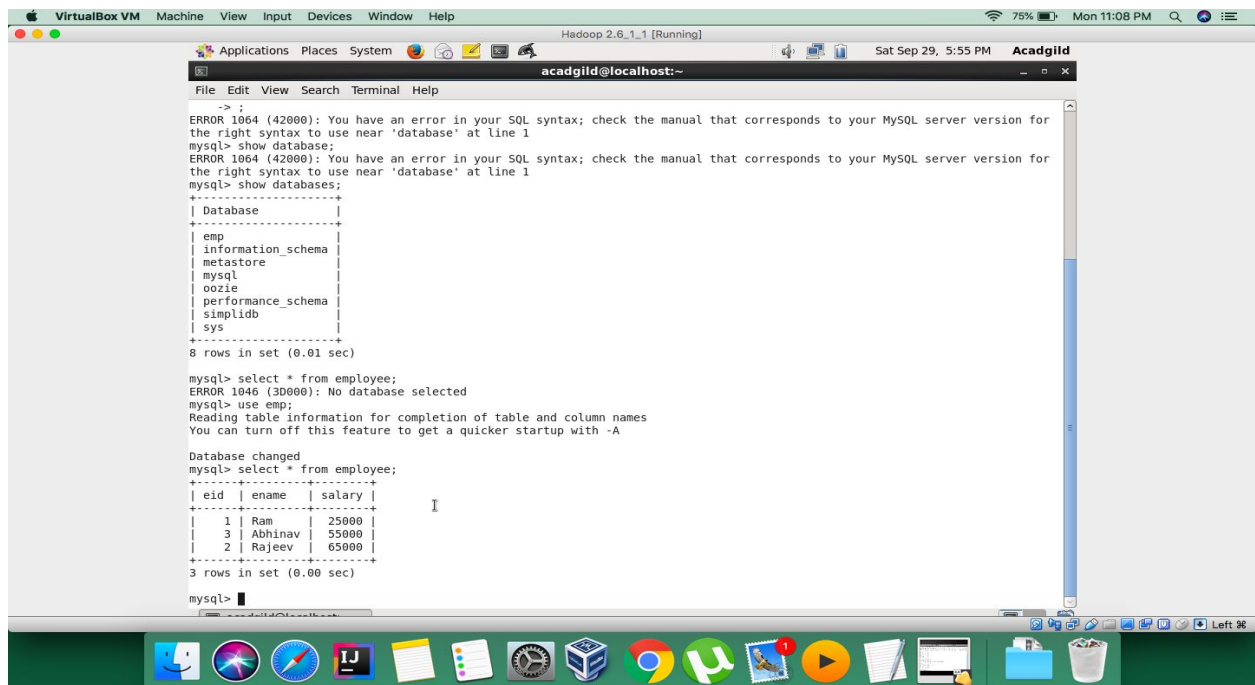


Assignment_6.1

1. Logged in to mysql. Selected the database emp created during the training session. Checked the table employee that was created during the training session.

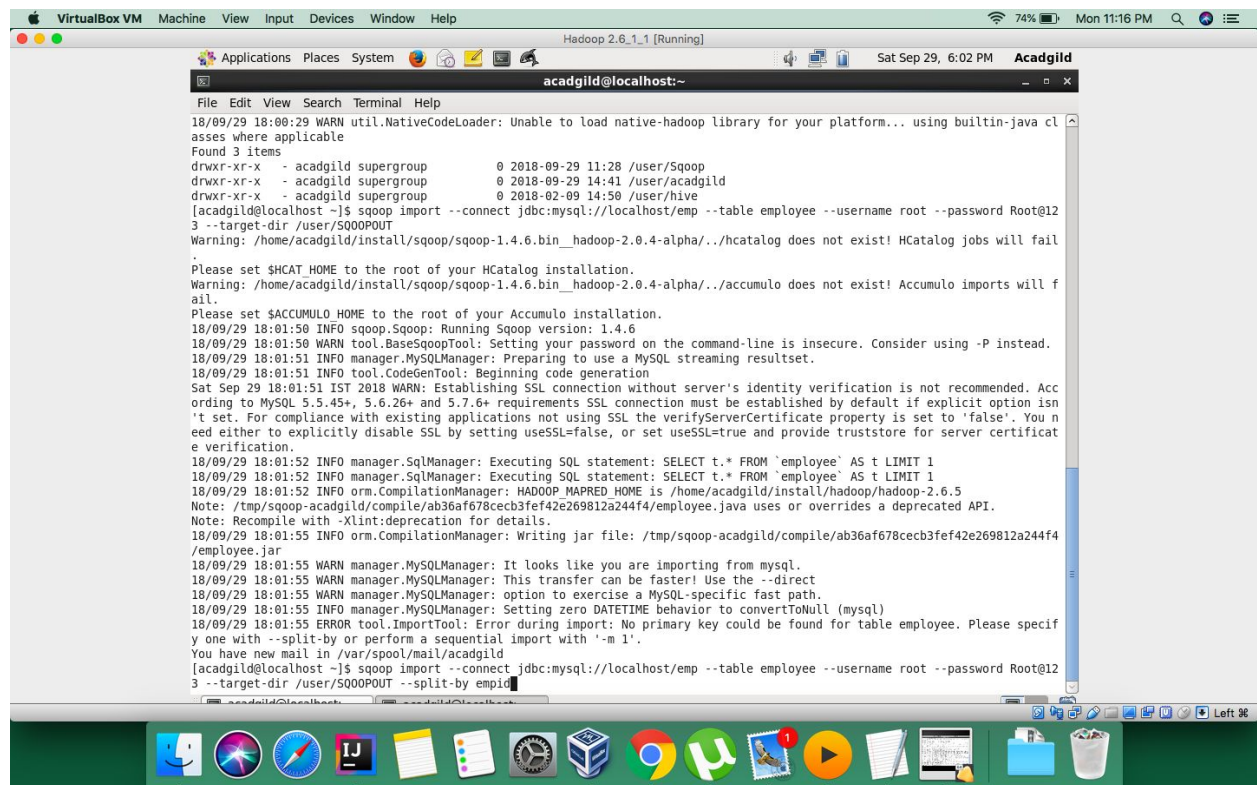


```
acadmild@localhost:~  
[acadmild@localhost ~]$ mysql --uroot --pRoot@123  
mysql: [ERROR] unknown option '--uroot'  
[acadmild@localhost ~]$ mysql -uroot -pRoot@123  
mysql: [Warning] Using a password on the command line interface can be insecure.  
Welcome to the MySQL monitor. Commands end with ; or \g.  
Your MySQL connection id is 26  
Server version: 8.0.3-rc-log MySQL Community Server (GPL)  
  
Copyright (c) 2000, 2017, Oracle and/or its affiliates. All rights reserved.  
  
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> show database  
-> ;  
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for  
the right syntax to use near 'database' at line 1  
mysql> show database;  
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for  
the right syntax to use near 'database' at line 1  
mysql> show databases;  
+-----+  
| Database |  
+-----+  
| emp      |  
| information_schema |  
| metastore |  
| mysql    |  
| oozie    |  
| performance_schema |  
| simplidb |  
| sys      |  
+-----+  
8 rows in set (0.01 sec)  
  
mysql>
```

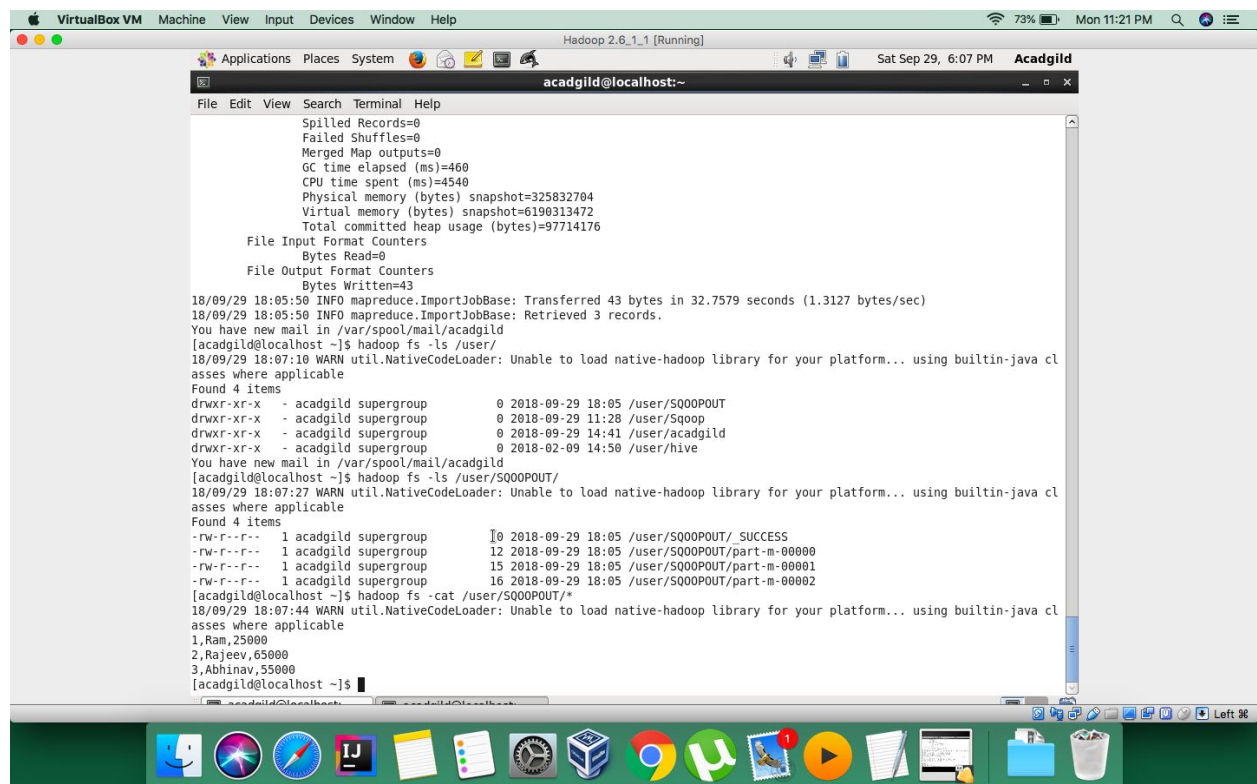


```
acadmild@localhost:~  
-> ;  
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for  
the right syntax to use near 'database' at line 1  
mysql> show database;  
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for  
the right syntax to use near 'database' at line 1  
mysql> show databases;  
+-----+  
| Database |  
+-----+  
| emp      |  
| information_schema |  
| metastore |  
| mysql    |  
| oozie    |  
| performance_schema |  
| simplidb |  
| sys      |  
+-----+  
8 rows in set (0.01 sec)  
  
mysql> select * from employee;  
ERROR 1046 (3D000): No database selected  
mysql> use emp;  
Reading table information for completion of table and column names  
You can turn off this feature with -A  
  
Database changed  
mysql> select * from employee;  
+-----+  
| eid | ename | salary |  
+-----+  
| 1   | Ram   | 25000  |  
| 3   | Abhinav | 55000  |  
| 2   | Rajeev | 65000  |  
+-----+  
3 rows in set (0.00 sec)  
  
mysql>
```

2. Used the command **sqoop import --connect jdbc:mysql://localhost/emp --table employee --username root --password Root@123 --target-dir /user/SQOOPOUT --split-by eid** to import the data from employee table to hdfs.

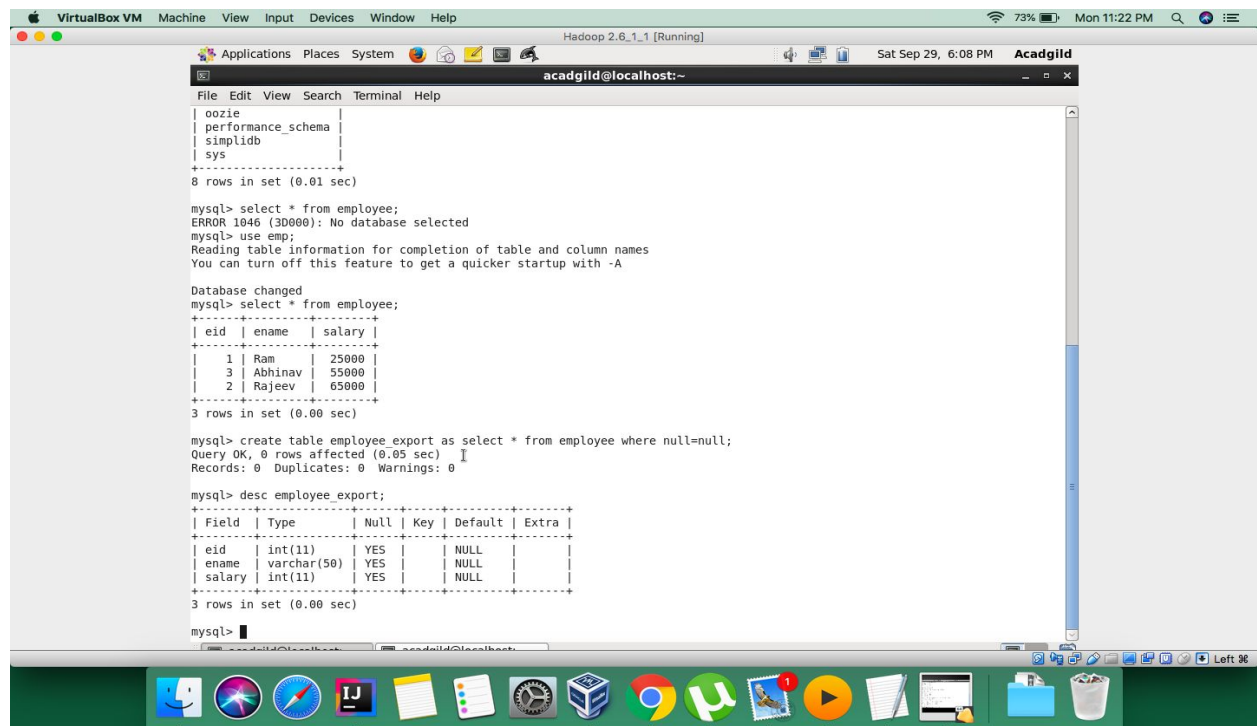


```
acacgild@localhost:~  
18/09/29 18:08:29 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl  
asses where applicable  
Found 3 items  
drwxr-xr-x - acacgild supergroup          0 2018-09-29 11:28 /user/Sqoop  
drwxr-xr-x - acacgild supergroup          0 2018-09-29 14:41 /user/acacgild  
drwxr-xr-x - acacgild supergroup          0 2018-02-09 14:50 /user/hive  
[acacgild@localhost ~]$ sqoop import --connect jdbc:mysql://localhost/emp --table employee --username root --password Root@12  
3 --target-dir /user/SQOOPOUT  
Warning: /home/acacgild/install/sqoop/sqoop-1.4.6.bin_hadoop-2.0.4-alpha/./hcatalog does not exist! HCatalog jobs will fail  
  
Please set $HCAT HOME to the root of your HCatalog installation.  
Warning: /home/acacgild/install/sqoop/sqoop-1.4.6.bin_hadoop-2.0.4-alpha/./accumulo does not exist! Accumulo imports will f  
ail  
Please set $ACCUMULO HOME to the root of your Accumulo installation.  
18/09/29 18:01:50 INFO sqoop.Sqoop: Running Sqoop version: 1.4.6  
18/09/29 18:01:50 WARN tool.BaseSqoopTool: Setting your password on the command-line is insecure. Consider using -P instead.  
18/09/29 18:01:51 INFO manager.MySQLManager: Preparing to use a MySQL streaming resultset.  
18/09/29 18:01:51 INFO tool.CodeGenTool: Beginning code generation  
Sat Sep 29 18:01:51 IST 2018 WARN: Establishing SSL connection without server's identity verification is not recommended. Acc  
ording to MySQL 5.5.45+, 5.6.26+ and 5.7.6+ requirements SSL connection must be established by default if explicit option isn  
't set. For compliance with existing applications not using SSL the verifyServerCertificate property is set to 'false'. You n  
eed either to explicitly disable SSL by setting useSSL=false, or set useSSL=true and provide truststore for server certificat  
e verification.  
18/09/29 18:01:52 INFO manager.SqlManager: Executing SQL statement: SELECT t.* FROM `employee` AS t LIMIT 1  
18/09/29 18:01:52 INFO manager.SqlManager: Executing SQL statement: SELECT t.* FROM `employee` AS t LIMIT 1  
18/09/29 18:01:52 INFO orm.CompilationManager: HADOOP_MAPRED_HOME is /home/acacgild/install/hadoop/hadoop-2.6.5  
Note: /tmp/sqoop-acacgild/compile/ab36af678cecb3fef42e269812a244f4/employee.java uses or overrides a deprecated API.  
Note: Recompile with -Xlint:deprecation for details.  
18/09/29 18:01:55 INFO orm.CompilationManager: Writing jar file: /tmp/sqoop-acacgild/compile/ab36af678cecb3fef42e269812a244f4  
/employee.jar  
18/09/29 18:01:55 WARN manager.MySQLManager: It looks like you are importing from mysql.  
18/09/29 18:01:55 WARN manager.MySQLManager: This transfer can be faster! Use the --direct  
18/09/29 18:01:55 WARN manager.MySQLManager: option to exercise a MySQL-specific fast path.  
18/09/29 18:01:55 INFO manager.MySQLManager: Setting zero DATETIME behavior to convertToNull (mysql)  
18/09/29 18:01:55 ERROR tool.ImportTool: Error during import: No primary key could be found for table employee. Please specifi  
y one with --split-by or perform a sequential import with '-m 1'.  
You have new mail in /var/spool/mail/acacgild  
[acacgild@localhost ~]$ sqoop import --connect jdbc:mysql://localhost/emp --table employee --username root --password Root@12  
3 --target-dir /user/SQOOPOUT --split-by eid  
acacgild@localhost:~
```



```
acacgild@localhost:~  
18/09/29 18:05:50 INFO mapreduce.ImportJobBase: Transferred 43 bytes in 32.7579 seconds (1.3127 bytes/sec)  
18/09/29 18:05:50 INFO mapreduce.ImportJobBase: Retrieved 3 records.  
You have new mail in /var/spool/mail/acacgild  
[acacgild@localhost ~]$ hadoop fs -ls /user/  
18/09/29 18:07:10 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl  
asses where applicable  
Found 4 items  
drwxr-xr-x - acacgild supergroup          0 2018-09-29 18:05 /user/SQOOPOUT  
drwxr-xr-x - acacgild supergroup          0 2018-09-29 11:28 /user/Sqoop  
drwxr-xr-x - acacgild supergroup          0 2018-09-29 14:41 /user/acacgild  
drwxr-xr-x - acacgild supergroup          0 2018-02-09 14:50 /user/hive  
You have new mail in /var/spool/mail/acacgild  
[acacgild@localhost ~]$ hadoop fs -ls /user/SQOOPOUT/  
18/09/29 18:07:27 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl  
asses where applicable  
Found 4 items  
-rw-r--r-- 1 acacgild supergroup          0 2018-09-29 18:05 /user/SQOOPOUT/_SUCCESS  
-rw-r--r-- 1 acacgild supergroup          12 2018-09-29 18:05 /user/SQOOPOUT/part-m-00000  
-rw-r--r-- 1 acacgild supergroup          15 2018-09-29 18:05 /user/SQOOPOUT/part-m-00001  
-rw-r--r-- 1 acacgild supergroup          16 2018-09-29 18:05 /user/SQOOPOUT/part-m-00002  
[acacgild@localhost ~]$ hadoop fs -cat /user/SQOOPOUT/*  
18/09/29 18:07:44 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl  
asses where applicable  
1.Ram,25000  
2.Rajeev,65000  
3.Abhinav,55000  
[acacgild@localhost ~]$
```

3. Created employee_export table using the employee table in mysql.



The screenshot shows a MySQL terminal window with the following commands and output:

```
mysql> select * from employee;
ERROR 1046 (3D000): No database selected
mysql> use emp;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

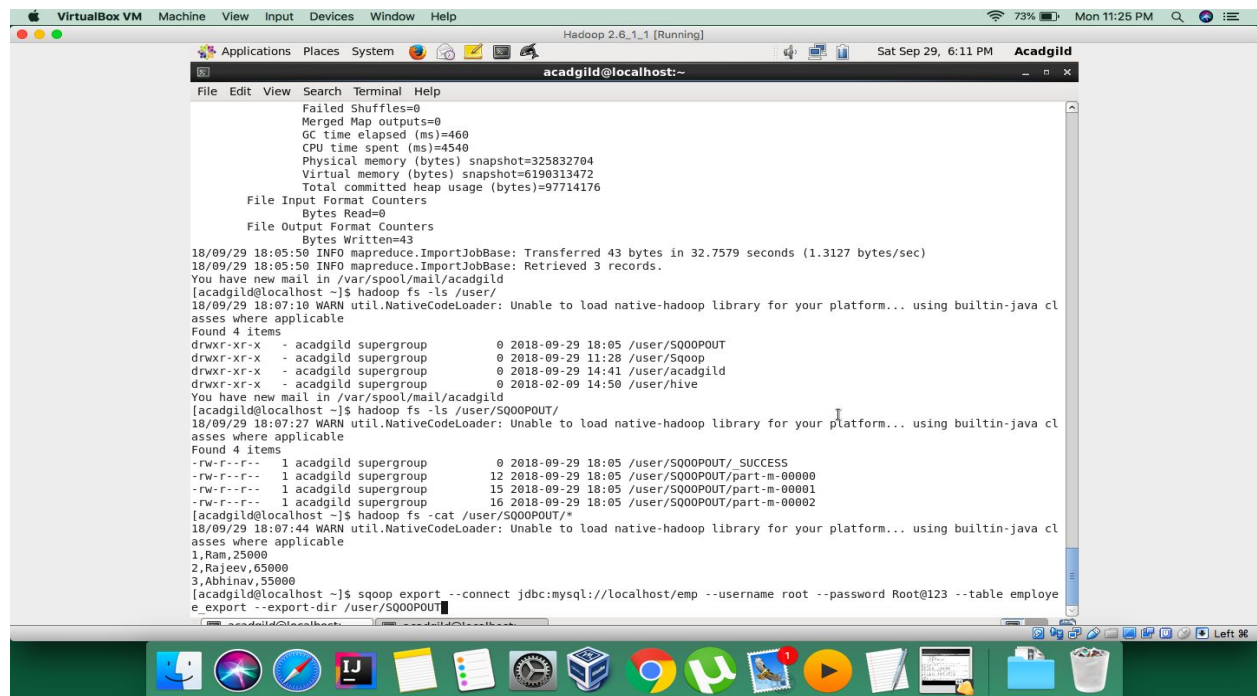
Database changed
mysql> select * from employee;
+----+-----+-----+
| eid | ename | salary |
+----+-----+-----+
| 1   | Ram   | 25000  |
| 3   | Abhinav | 55000  |
| 2   | Rajeev | 65000  |
+----+-----+-----+
3 rows in set (0.00 sec)

mysql> create table employee_export as select * from employee where null=null;
Query OK, 0 rows affected (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc employee_export;
+----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+----+-----+-----+-----+-----+-----+
| eid   | int(11) | YES | | NULL | |
| ename | varchar(50) | YES | | NULL | |
| salary | int(11) | YES | | NULL | |
+----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

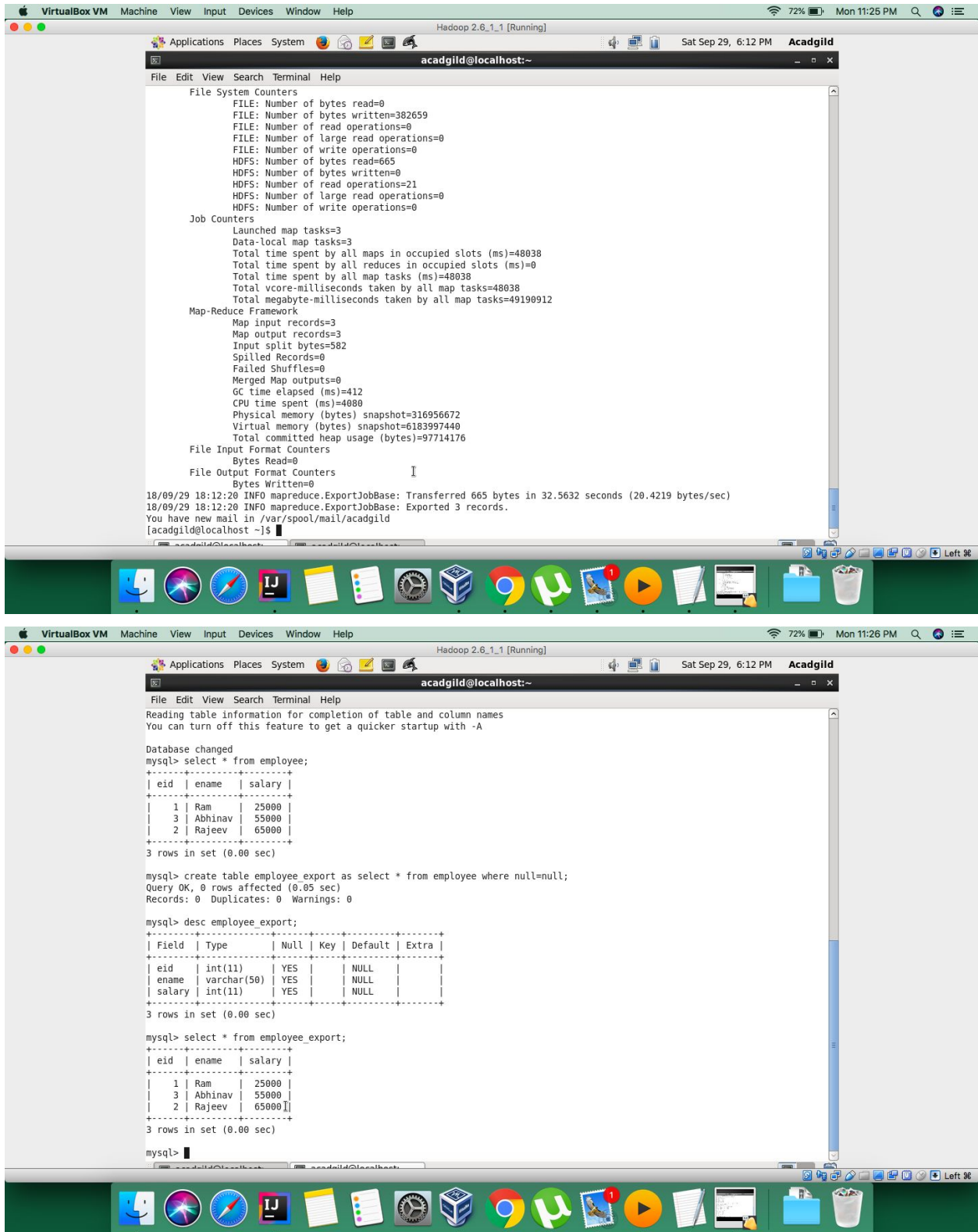
4. Used command **sqoop export --connect jdbc:mysql://localhost/emp -username root --password root@123 --table employee_export --export-dir /user/SQOOPOUT** to export the data from the folder SQOOPOUT in hdfs to table employee_export.



The screenshot shows a Hadoop terminal window with the following commands and output:

```
18/09/29 18:05:50 INFO mapreduce.ImportJobBase: Transferred 43 bytes in 32.7579 seconds (1.3127 bytes/sec)
18/09/29 18:05:50 INFO mapreduce.ImportJobBase: Retrieved 3 records.
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -ls /user/
18/09/29 18:07:10 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 4 items
drwxr-xr-x - acadgild supergroup 0 2018-09-29 18:05 /user/SQOOPOUT
drwxr-xr-x - acadgild supergroup 0 2018-09-29 11:28 /user/Sqoop
drwxr-xr-x - acadgild supergroup 0 2018-09-29 14:41 /user/acadgild
drwxr-xr-x - acadgild supergroup 0 2018-02-09 14:50 /user/hive
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -ls /user/SQOOPOUT/
18/09/29 18:07:27 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 4 items
-rw-r--r-- 1 acadgild supergroup 0 2018-09-29 18:05 /user/SQOOPOUT/_SUCCESS
-rw-r--r-- 1 acadgild supergroup 12 2018-09-29 18:05 /user/SQOOPOUT/part-m-00000
-rw-r--r-- 1 acadgild supergroup 15 2018-09-29 18:05 /user/SQOOPOUT/part-m-00001
-rw-r--r-- 1 acadgild supergroup 16 2018-09-29 18:05 /user/SQOOPOUT/part-m-00002
[acadgild@localhost ~]$ hadoop fs -cat /user/SQOOPOUT/*
18/09/29 18:07:44 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
1,Ram,25000
3,Abhinav,55000
2,Rajeev,65000
[acadgild@localhost ~]$ sqoop export --connect jdbc:mysql://localhost/emp --username root --password Root@123 --table employe
e_export --export-dir /user/SQOOPOUT
```

5. The export was successful. Checked the employee_export data to check if the data was exported into the table successfully.



```
acadgild@localhost:~$
File System Counters
  FILE: Number of bytes read=0
  FILE: Number of bytes written=302659
  FILE: Number of read operations=0
  FILE: Number of large read operations=0
  FILE: Number of write operations=0
  HDFS: Number of bytes read=665
  HDFS: Number of bytes written=0
  HDFS: Number of read operations=21
  HDFS: Number of large read operations=0
  HDFS: Number of write operations=0
Job Counters
  Launched map tasks=3
  Data-local map tasks=3
  Total time spent by all maps in occupied slots (ms)=48038
  Total time spent by all reduces in occupied slots (ms)=0
  Total time spent by all map tasks (ms)=48038
  Total vcore-milliseconds taken by all map tasks=48038
  Total megabyte-milliseconds taken by all map tasks=49190912
Map-Reduce Framework
  Map input records=3
  Map output records=3
  Input split bytes=582
  Spilled Records=0
  Failed Shuffles=0
  Merged Map outputs=0
  GC time elapsed (ms)=412
  CPU time spent (ms)=4080
  Physical memory (bytes) snapshot=316956672
  Virtual memory (bytes) snapshot=6183997440
  Total committed heap usage (bytes)=97714176
File Input Format Counters
  Bytes Read=0
File Output Format Counters
  Bytes Written=0
18/09/29 18:12:20 INFO mapreduce.ExportJobBase: Transferred 665 bytes in 32.5632 seconds (20.4219 bytes/sec)
18/09/29 18:12:20 INFO mapreduce.ExportJobBase: Exported 3 records.
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$
```

```
acadgild@localhost:~$
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select * from employee;
+----+-----+-----+
| eid | ename | salary |
+----+-----+-----+
| 1   | Ram   | 25000  |
| 3   | Abhinav | 55000  |
| 2   | Rajeev | 65000  |
+----+-----+-----+
3 rows in set (0.00 sec)

mysql> create table employee_export as select * from employee where null=null;
Query OK, 0 rows affected (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc employee_export;
+----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+----+-----+-----+-----+-----+-----+
| eid   | int(11) | YES | | NULL | |
| ename | varchar(50) | YES | | NULL | |
| salary | int(11) | YES | | NULL | |
+----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> select * from employee_export;
+----+-----+-----+
| eid | ename | salary |
+----+-----+-----+
| 1   | Ram   | 25000  |
| 3   | Abhinav | 55000  |
| 2   | Rajeev | 65000  |
+----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```