

## Output Screenshots:

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\WARNING: Attempting to start all Apache Hadoop daemons as hduser in 10 seconds.
WARNING: This is not a recommended production deployment configuration.
WARNING: Use CTRL-C to abort.
Starting namenodes on [localhost]
Starting datanodes
Starting secondary namenodes [kratharth-Lenovo-ideapad-310-15IKB]
2020-12-21 16:46:34,817 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-j
  applicable
Starting resourcemanager
Starting nodemanagers
hduser@kratharth-Lenovo-ideapad-310-15IKB: /usr/local/apache-hive-3.1.1-bin/bin$ \jps
^Chduser@kratharth-Lenovo-ideapad-310-15IKB: /usr/local/apache-hive-3.1.1-bin/bin$ jps
21233 SecondaryNameNode
20994 DataNode
21960 Jps
20825 NameNode
21596 NodeManager
21437 ResourceManager
hduser@kratharth-Lenovo-ideapad-310-15IKB: /usr/local/apache-hive-3.1.1-bin/bin$ hive
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/usr/local/apache-hive-3.1.1-bin/lib/log4j-slf4j-impl-2.10.0.jar!/org/slf4j/impl/StaticLogg
SLF4J: Found binding in [jar:file:/usr/local/hadoop/share/hadoop/common/lib/slf4j-log4j12-1.7.25.jar!/org/slf4j/impl/StaticLo
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 = 1a93368e-12f5-4e8d-9f2c-e5d2348ccf6f

Logging initialized using configuration in jar:file:/usr/local/apache-hive-3.1.1-bin/lib/hive-common-3.1.1.jar!/hive-log4j2.p
true
Hive Session ID = 065c3e2b-2dc3-4c78-a1fa-28088b17273f
Hive-on-MR is deprecated in Hive 2 and may not be available in the future versions. Consider using a different execution engi
ez) or using Hive 1.X releases.
hive> CREATE DATABASE IF NOT EXISTS students COMMENT 'Student Details' WITH DBPROPERTIES('creator'='Kratharth');
OK
Time taken: 0.928 seconds
hive> use students;
OK
Time taken: 0.091 seconds
hive> 
```

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ez) or using Hive 1.X releases.
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OK
Time taken: 0.928 seconds
hive> use students;
OK
Time taken: 0.091 seconds
hive> CREATE EXTERNAL TABLE IF NOT EXISTS EMPLOYEE(Emp_id INT,Emp_Name STRING,Designation STRING,Salary INT) ROW FORMAT DELIM
NATED BY '\t' LOCATION '/EMPLOYEE_INFO';
OK
Time taken: 1.196 seconds
hive> 
```

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at org.apache.hadoop.hive ql.reexec.ReExecDriver.run(ReExecDriver.java:214)
at org.apache.hadoop.hive.cli.CliDriver.processLocalCmd(CliDriver.java:239)
at org.apache.hadoop.hive.cli.CliDriver.processCmd(CliDriver.java:188)
at org.apache.hadoop.hive.cli.CliDriver.processLine(CliDriver.java:402)
at org.apache.hadoop.hive.cli.CliDriver.executeDriver(CliDriver.java:821)
at org.apache.hadoop.hive.cli.CliDriver.run(CliDriver.java:759)
at org.apache.hadoop.hive.cli.CliDriver.main(CliDriver.java:683)
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:62)
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
at java.lang.reflect.Method.invoke(Method.java:498)
at org.apache.hadoop.util.RunJar.run(RunJar.java:323)
at org.apache.hadoop.util.RunJar.main(RunJar.java:236)
FAILED: ParseException line 1:0 cannot recognize input near 'clear' 'clear' '<EOF>'
hive> LOAD DATA LOCAL INPATH '/home/kratharth/BDA Lab/BDA_LAB/Lab 9/data.txt' OVERWRITE INTO EMPLOYEE;
FAILED: ParseException line 1:87 missing TABLE at 'EMPLOYEE' near '<EOF>'
hive> LOAD DATA LOCAL INPATH '/home/kratharth/BDA Lab/BDA_LAB/Lab 9/data.txt' OVERWRITE INTO TABLE EMPLOYEE;
Loading data to table students.employee
OK
Time taken: 3.145 seconds
hive> SELECT * FROM EMPLOYEE;
OK
1001 Kratharth Manager 35000
1002 Kedar Assistant 40000
1003 Krishna Assistant_To_Regional_Manager 25000
1004 Abhilash Other_Manager 50000
1005 Rahul Other_Assistant 15000
Time taken: 3.116 seconds, Fetched: 5 row(s)
hive> CREATE VIEW employee_view as SELECT * FROM EMPLOYEE WHERE SALARY>30000;
OK
Time taken: 0.757 seconds
hive> select * from employee_view;
OK
1001 Kratharth Manager 35000
1002 Kedar Assistant 40000
1004 Abhilash Other_Manager 50000
Time taken: 0.275 seconds, Fetched: 3 row(s)

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at org.apache.hadoop.hive.cli.CliDriver.processCmd(CliDriver.java:188)
at org.apache.hadoop.hive.cli.CliDriver.processLine(CliDriver.java:402)
at org.apache.hadoop.hive.cli.CliDriver.executeDriver(CliDriver.java:821)
at org.apache.hadoop.hive.cli.CliDriver.run(CliDriver.java:759)
at org.apache.hadoop.hive.cli.CliDriver.main(CliDriver.java:683)
at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
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at java.lang.reflect.Method.invoke(Method.java:498)
at org.apache.hadoop.util.RunJar.run(RunJar.java:323)
at org.apache.hadoop.util.RunJar.main(RunJar.java:236)
FAILED: ParseException line 1:25 cannot recognize input near 'ADD' 'COLUMNS' '(' in alter table statement
hive> ALTER TABLE EMPLOYEE ADD COLUMN$ (DEPT_ID INT);
OK
Time taken: 0.434 seconds
hive> SELECT * FROM EMPLOYEE;
OK
1001 Kratharth Manager 35000 NULL
1002 Kedar Assistant 40000 NULL
1003 Krishna Assistant_To_Regional_Manager 25000 NULL
1004 Abhilash Other_Manager 50000 NULL
1005 Rahul Other_Assistant 15000 NULL
Time taken: 0.196 seconds, Fetched: 5 row(s)
hive> UPDATE EMPLOYEE SET DEPT_ID = 3001 WHERE EMP_ID=1001;
FAILED: SemanticException [Error 10294]: Attempt to do update or delete using transaction manager that does not support these
hive> LOAD DATA LOCAL INPATH '/home/kratharth/BDA Lab/BDA_LAB/Lab 9/data.txt' OVERWRITE INTO TABLE EMPLOYEE;
Loading data to table students.employee
OK
Time taken: 0.457 seconds

```



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Stage-Stage-1: HDFS Read: 2608 HDFS Write: 738 SUCCESS
Total MapReduce CPU Time Spent: 0 msec
OK
3001 1
3002 2
3003 2
Time taken: 1.561 seconds, Fetched: 3 row(s)
hive> SELECT DEPT_ID,count(*) FROM EMPLOYEE GROUP BY DEPT_ID HAVING SALARY>30000;
FAILED: SemanticException [Error 10025]: Line 1:62 Expression not in GROUP BY key '30000'
hive> SELECT DEPT_ID,count(*),sum(SALARY) FROM EMPLOYEE GROUP BY DEPT_ID HAVING SALARY>30000;
FAILED: SemanticException [Error 10025]: Line 1:74 Expression not in GROUP BY key '30000'
hive> SELECT DEPT_ID,count(*),SALARY FROM EMPLOYEE GROUP BY DEPT_ID HAVING SALARY>30000;
FAILED: SemanticException [Error 10025]: Line 1:69 Expression not in GROUP BY key '30000'
hive> SELECT DEPT_ID,count(*) FROM EMPLOYEE GROUP BY DEPT_ID HAVING SALARY>30000;
FAILED: SemanticException [Error 10025]: Line 1:62 Expression not in GROUP BY key '30000'
hive> SELECT DEPT_ID,count(*) FROM EMPLOYEE GROUP BY DEPT_ID,SALARY HAVING SALARY>30000;
Query ID = hduser_20201221174236_2a2f1aec-7b7f-4fbc-bc79-2a7df7af4c6b
Total jobs = 1
Launching Job 1 out of 1
Number of reduce tasks not specified. Estimated from input data size: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Job running in-process (local Hadoop)
2020-12-21 17:42:37,985 Stage-1 map = 100%, reduce = 100%
Ended Job = job_local634340042_0004
MapReduce Jobs Launched:
Stage-Stage-1: HDFS Read: 3002 HDFS Write: 738 SUCCESS
Total MapReduce CPU Time Spent: 0 msec
OK
3001 1
3002 1
3003 1
Time taken: 1.499 seconds, Fetched: 3 row(s)
hive>

```

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MismatchedTokenException(951=306)
    at org.apache.hadoop.hive.ql.parse.HiveParser.tableRowFormatCollItemsIdentifier(HiveParser.java:28842)
    at org.apache.hadoop.hive.ql.parse.HiveParser.rowFormatDelimited(HiveParser.java:27773)
    at org.apache.hadoop.hive.ql.parse.HiveParser.tableRowFormat(HiveParser.java:28001)
    at org.apache.hadoop.hive.ql.parse.HiveParser.createTableStatement(HiveParser.java:6765)
    at org.apache.hadoop.hive.ql.parse.HiveParser.ddlStatement(HiveParser.java:4295)
    at org.apache.hadoop.hive.ql.parse.HiveParser.execStatement(HiveParser.java:2494)
    at org.apache.hadoop.hive.ql.parse.HiveParser.statement(HiveParser.java:1420)
    at org.apache.hadoop.hive.ql.parse.ParseDriver.parse(ParseDriver.java:220)
    at org.apache.hadoop.hive.ql.parse.ParseUtils.parse(ParseUtils.java:74)
    at org.apache.hadoop.hive.ql.parse.ParseUtils.parse(ParseUtils.java:67)
    at org.apache.hadoop.hive.ql.Driver.compile(Driver.java:616)
    at org.apache.hadoop.hive.ql.Driver.compileInternal(Driver.java:1826)
    at org.apache.hadoop.hive.ql.Driver.compileAndRespond(Driver.java:1773)
    at org.apache.hadoop.hive.ql.Driver.compileAndRespond(Driver.java:1768)
    at org.apache.hadoop.hive.ql.rexec.ReExecDriver.compileAndRespond(ReExecDriver.java:126)
    at org.apache.hadoop.hive.ql.rexec.ReExecDriver.run(ReExecDriver.java:214)
    at org.apache.hadoop.hive.cli.CliDriver.processLocalCmd(CliDriver.java:239)
    at org.apache.hadoop.hive.cli.CliDriver.processCmd(CliDriver.java:188)
    at org.apache.hadoop.hive.cli.CliDriver.processLine(CliDriver.java:402)
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    at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
    at java.lang.reflect.Method.invoke(Method.java:498)
    at org.apache.hadoop.util.RunJar.run(RunJar.java:323)
    at org.apache.hadoop.util.RunJar.main(RunJar.java:236)
FAILED: ParseException line 1:155 mismatched input 'DELIMITED' expecting TERMINATED near 'ITEMS' in table row format's column
hive> CREATE TABLE IF NOT EXISTS department(DEPT_ID INT, DEPT_NAME STRING, EMP_ID ARRAY<STRING>) ROW FORMAT DELIMITED FIELDS
' COLLECTION ITEMS TERMINATED BY ':';
OK
Time taken: 0.164 seconds

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hive> LOAD DATA LOCAL INPATH '/home/kratharth/BDA Lab/BDA_LAB/Lab 9/dept_data.txt' OVERWRITE INTO TABLE department;
Loading data to table students.department
OK
Time taken: 1.058 seconds
hive> SELECT * FROM DEPARTMENT;
OK
3001    Sales    ["1001"]
3002    Engineering ["1002","1003"]
3003    HR      ["1004","1005"]
Time taken: 1.322 seconds, Fetched: 3 row(s)
hive> SELECT a.EMP_ID, A.EMP_NAME,a.DESIGNATION,a.SALARY,b.DEPT_NAME FROM EMPLOYEE a JOIN DEPARTMENT b ON a.DEPT_ID=b.DPET_ID
FAILED: SemanticException [Error 10002]: Line 1:112 Invalid column reference 'DPET ID'
hive> SELECT a.EMP_ID, A.EMP_NAME,a.DESIGNATION,a.SALARY,b.DEPT_NAME FROM EMPLOYEE a JOIN DEPARTMENT b ON a.DEPT_ID=b.DEPT_ID
Query ID = hduser_20201221184802_1194becb-a3be-40db-a244-8bfd93fd2d2f
Total jobs = 1

SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.apache.logging.slf4j.Log4jLoggerFactory]

Execution completed successfully
MapredLocal task succeeded
Launching Job 1 out of 1
Number of reduce tasks is set to 0 since there's no reduce operator
Job running in-process (local Hadoop)
2020-12-21 18:48:13,025 Stage-3 map = 100%, reduce = 0%
Ended Job = job_local1699674498_0001
MapReduce Jobs Launched:
Stage-Stage-3:  HDFS Read: 258 HDFS Write: 61 SUCCESS
Total MapReduce CPU Time Spent: 0 msec
OK

```