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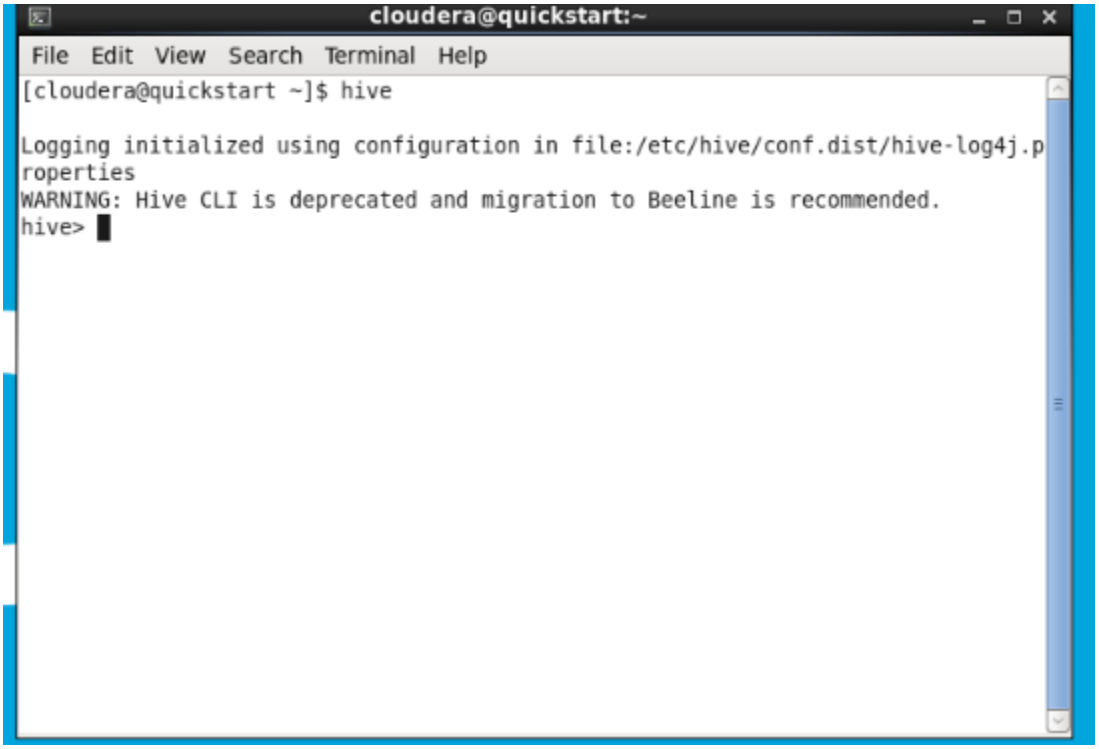
Hive command



Show databases;

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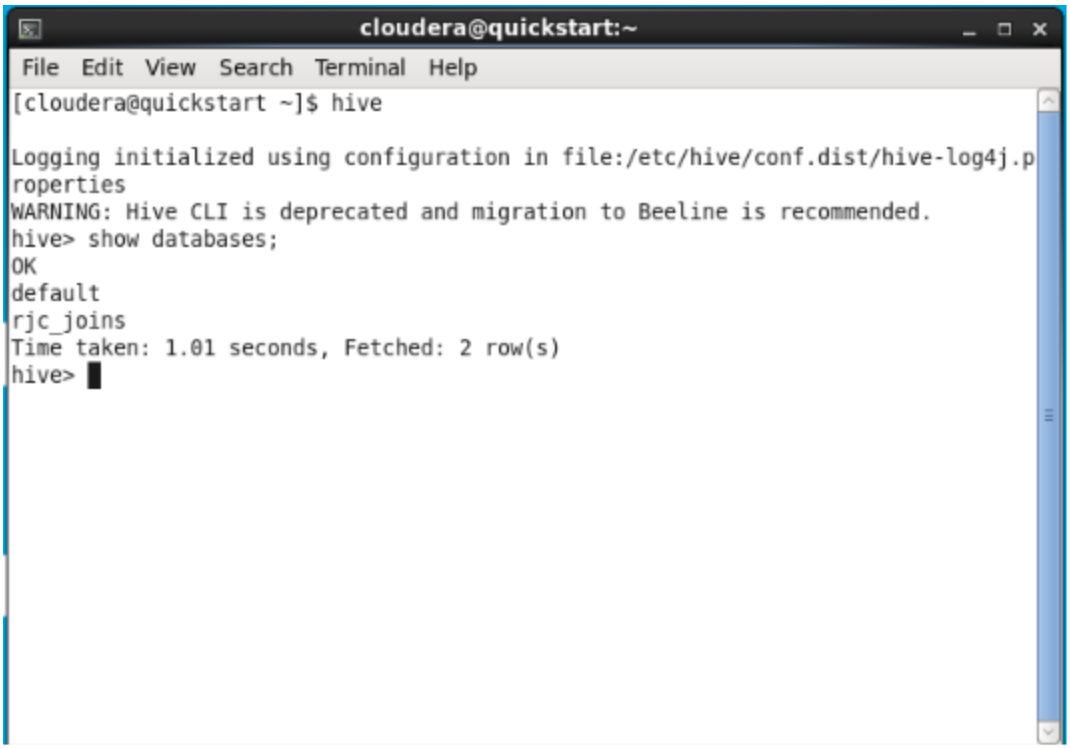
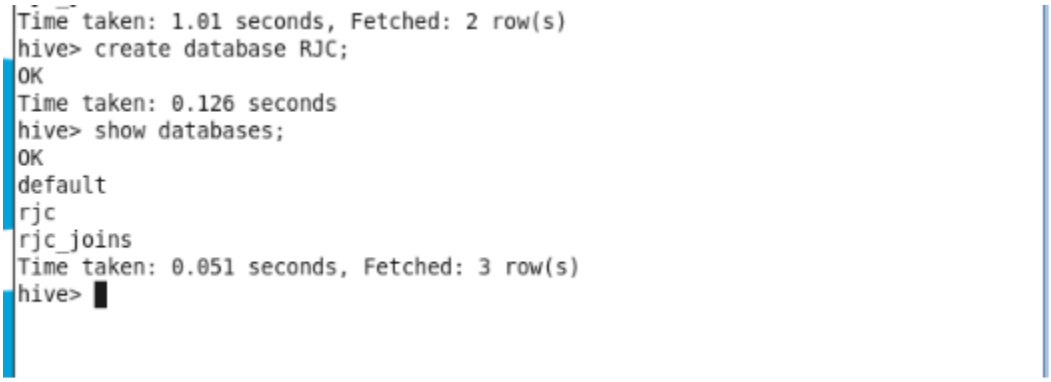
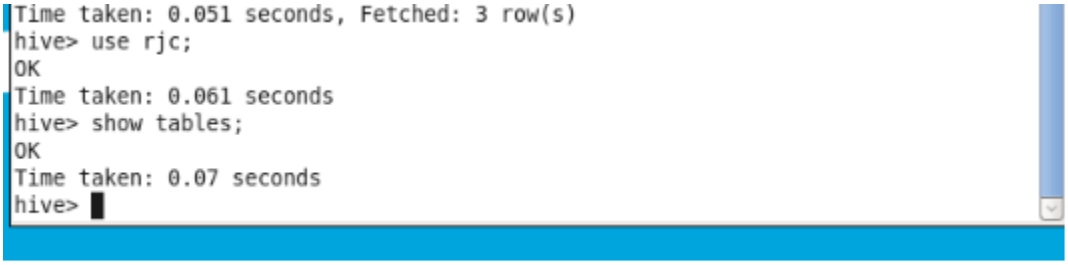


Create database RJC;



Use rjc;



drop rjc;

```
hive> drop database rjc;
OK
Time taken: 0.183 seconds
hive>
```

Create database RJC;

```
Time taken: 0.183 seconds
hive> create database rjc;
OK
Time taken: 0.072 seconds
hive>
```

Use rjc;

```
hive> use rjc;
OK
Time taken: 0.03 seconds
hive>
```

create table employee

```
Time taken: 0.03 seconds
hive> create table employee(ID int,name string,salary float,age int)
    > row format delimited
    > fields terminated by ',';
OK
Time taken: 0.288 seconds
hive>
```

describe employee;

```
Time taken: 0.288 seconds
hive> describe employee;
OK
id                      int
name                    string
salary                  float
age                     int
Time taken: 0.15 seconds, Fetched: 4 row(s)
```

describe formatted employee;

```
hive> describe formatted employee;
OK
# col_name              data_type               comment

id                      int
name                    string
salary                  float
age                     int

# Detailed Table Information
Database:               rjc
Owner:                  cloudera
CreateTime:             Mon Mar 21 00:05:22 PDT 2022
LastAccessTime:         UNKNOWN
Protect Mode:           None
Retention:              0
Location:               hdfs://quickstart.cloudera:8020/user/hive/warehouse/rjc.db/employee
Table Type:             MANAGED_TABLE
Table Parameters:
        transient_lastDdlTime   1647846322

# Storage Information
SerDe Library:          org.apache.hadoop.hive.serde2.lazy.LazySimpleSerDe
InputFormat:            org.apache.hadoop.mapred.TextInputFormat
OutputFormat:           org.apache.hadoop.hive.ql.io.HiveIgnoreKeyTextOutputFormat
Compressed:             No
Num Buckets:            -1
Bucket Columns:         []
Sort Columns:           []
Storage Desc Params:
        field.delim             ,
        serialization.format    ,
Time taken: 0.174 seconds, Fetched: 30 row(s)
hive>
```

create external table emloyee2

```
hive> create external table employee2(ID int,name string,salary float,age int)
    > row format delimited
    > fields terminated by ','
    > stored as textfile;
OK
Time taken: 0.162 seconds
hive>
```

describe employee2;

```
Time taken: 0.162 seconds
hive> describe employee2;
OK
id                      int
name                    string
salary                  float
age                     int
Time taken: 0.267 seconds, Fetched: 4 row(s)
hive>
```

describe formatted employee2;

```
hive> describe employee2;
OK
id                      int
name                    string
salary                  float
age                     int
Time taken: 0.267 seconds, Fetched: 4 row(s)
hive> describe formatted employee2;
OK
# col_name              data_type               comment

id                      int
name                    string
salary                  float
age                     int

# Detailed Table Information
Database:               rjc
Owner:                  cloudera
CreateTime:             Mon Mar 21 00:15:09 PDT 2022
LastAccessTime:         UNKNOWN
Protect Mode:           None
Retention:              0
Location:               hdfs://quickstart.cloudera:8020/user/hive/warehouse/rjc.db/employee2
Table Type:             EXTERNAL_TABLE
Table Parameters:
        EXTERNAL                TRUE
        transient_lastDdlTime   1647846909

# Storage Information
SerDe Library:          org.apache.hadoop.hive.serde2.lazy.LazySimpleSerDe
InputFormat:            org.apache.hadoop.mapred.TextInputFormat
OutputFormat:           org.apache.hadoop.hive.ql.io.HiveIgnoreKeyTextOutputFormat
Compressed:             No
```

```
OutputFormat:           org.apache.hadoop.hive.ql.io.HiveIgnoreKeyTextOutputFormat
Compressed:             No
Num Buckets:            -1
Bucket Columns:         []
Sort Columns:           []
Storage Desc Params:
        field.delim             ,
        serialization.format    ,
Time taken: 0.242 seconds, Fetched: 31 row(s)
hive>
```

Open the browser

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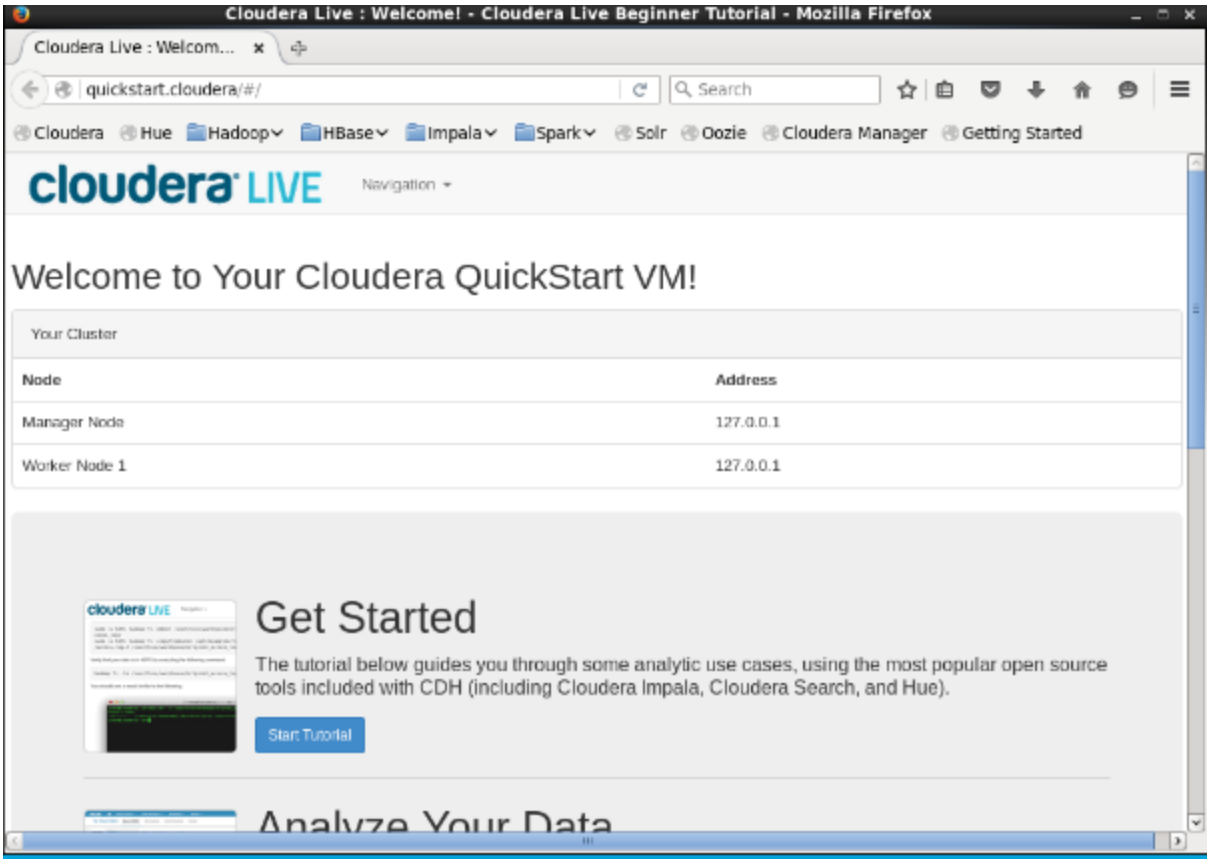

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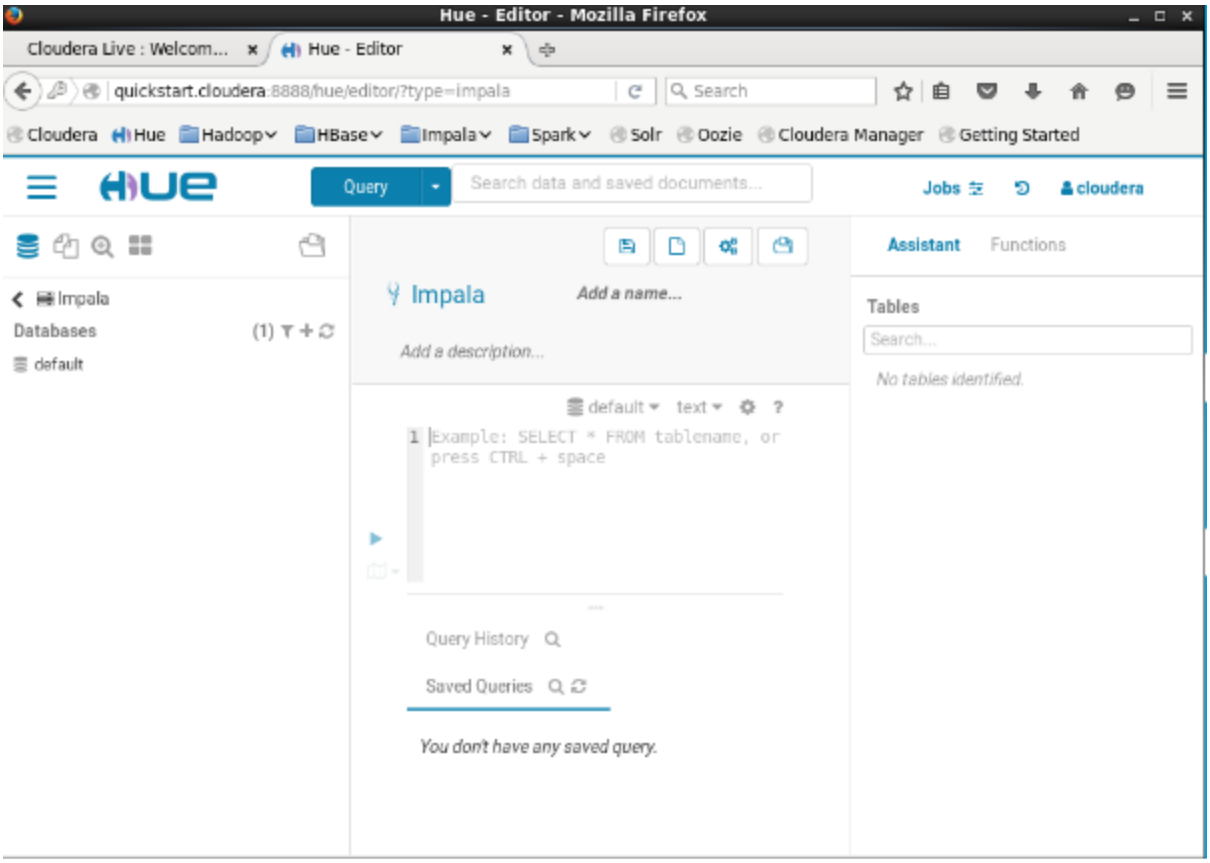

Show databases

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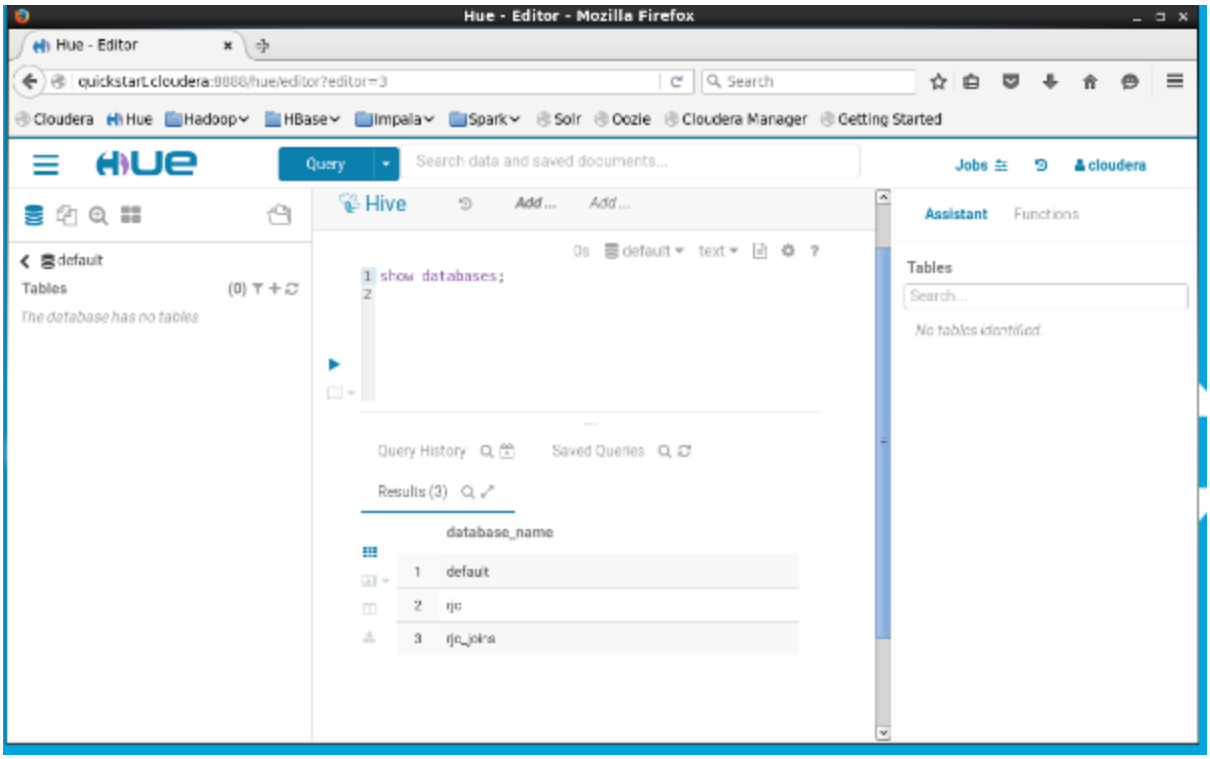

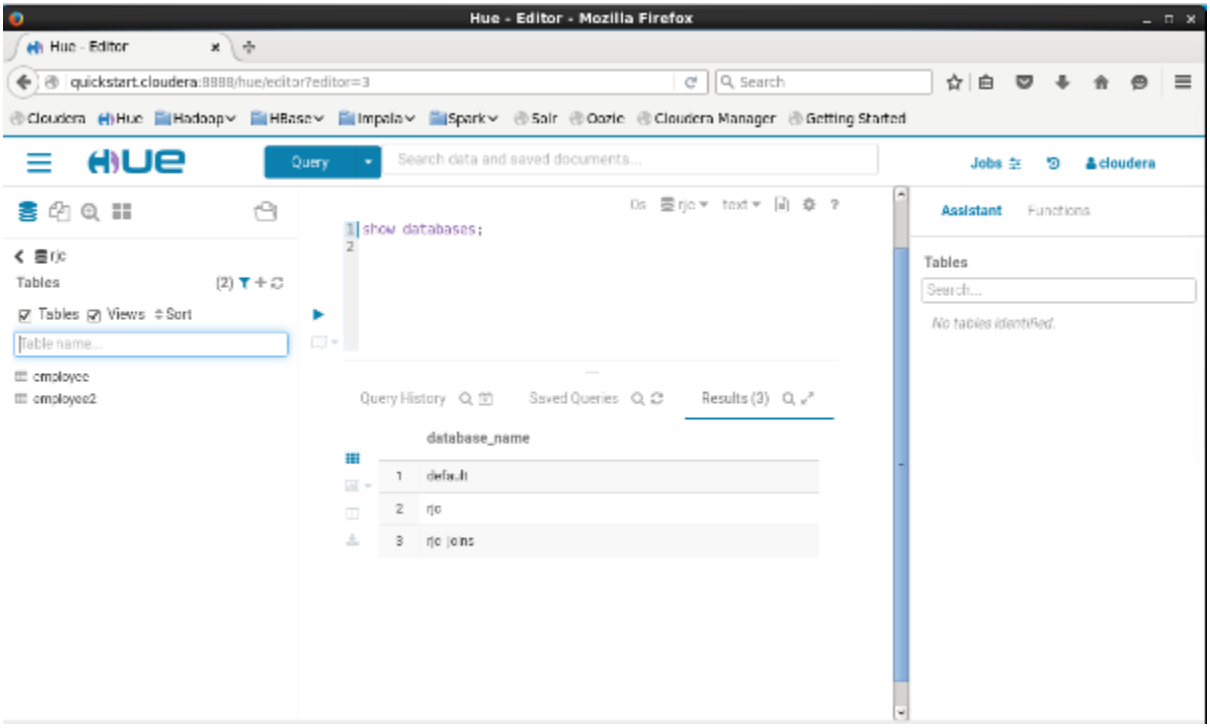

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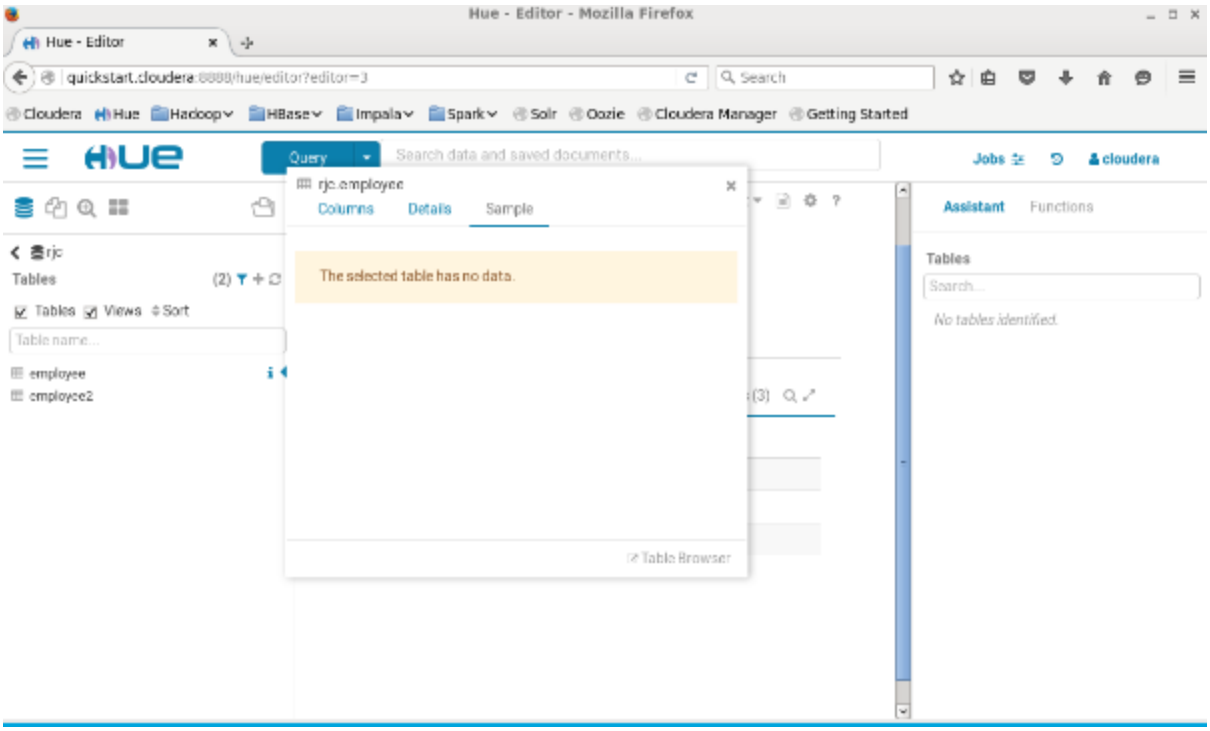

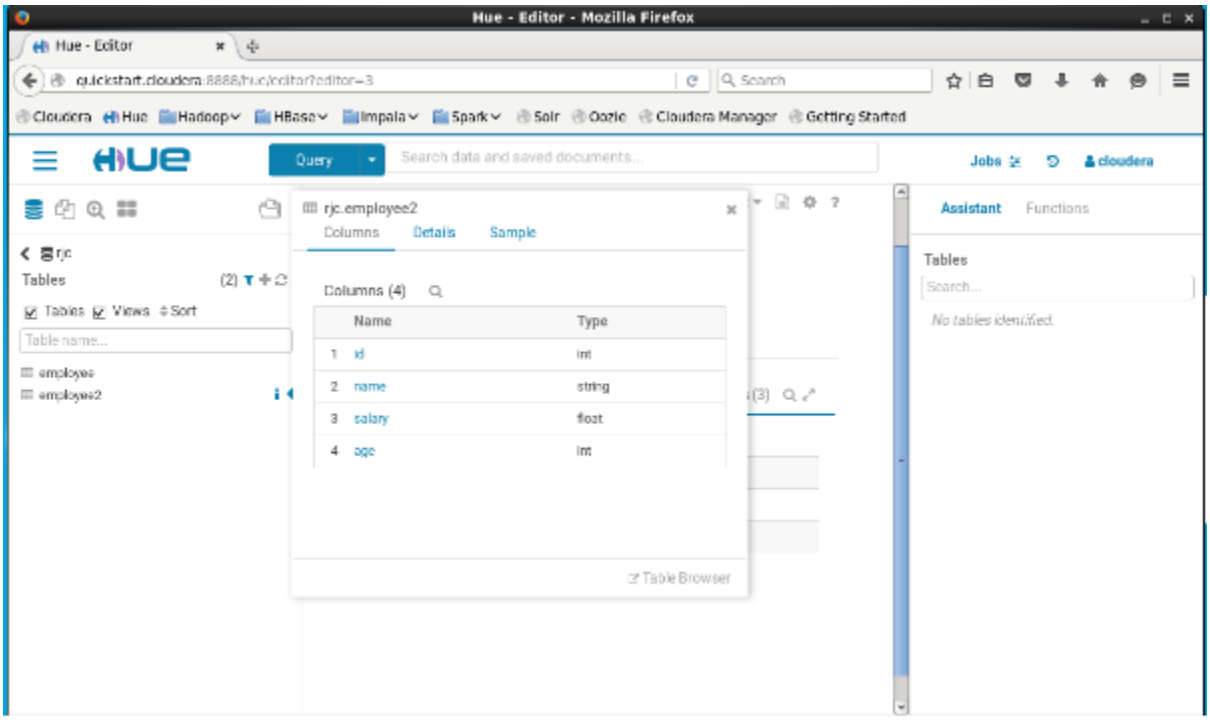

Create employee3

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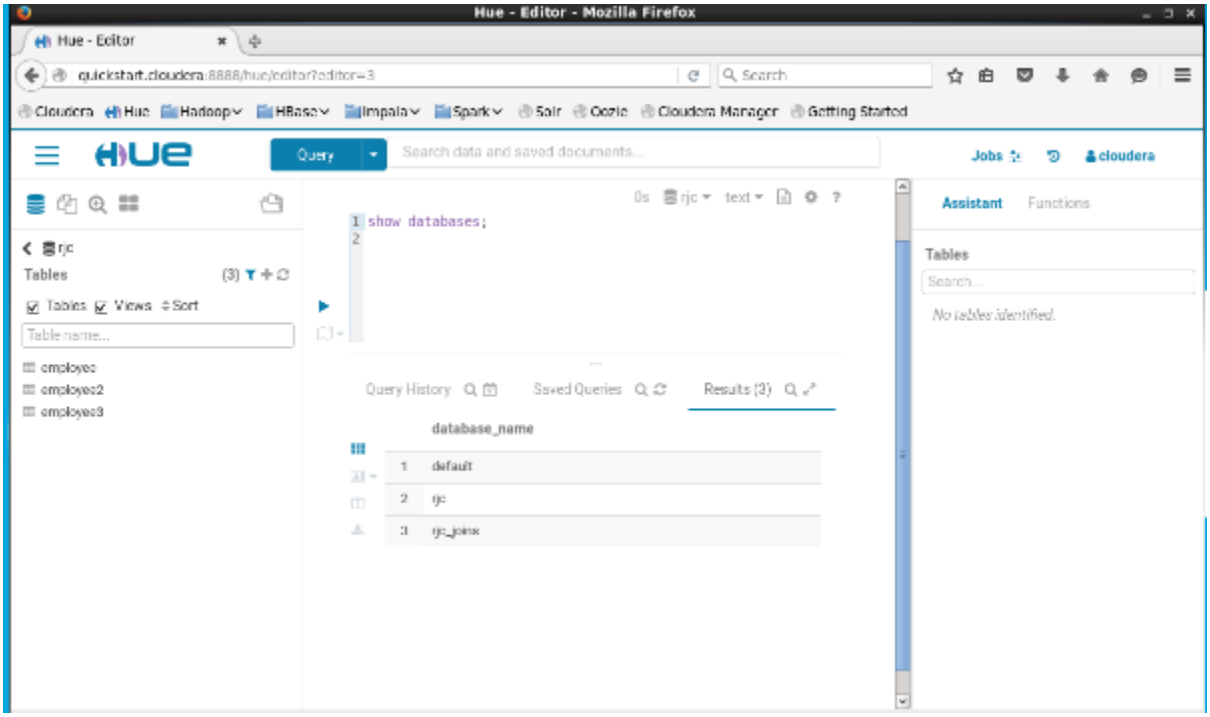
```
Time taken: 0.242 seconds, Fetched: 31 row(s)
hive> create external table employee3(ID int,name string,salary float,age int)
    > row format delimited
    > fields terminated by ','
    > location '/user/cloudera/vj';
OK
Time taken: 0.176 seconds
hive>
```

Describe employee3

```
Time taken: 0.176 seconds
hive> describe employee3;
OK
id                      int
name                    string
salary                  float
age                     int
Time taken: 0.104 seconds, Fetched: 4 row(s)
hive>
```

Now refresh browser ,employee3 is also generated in rjc database.



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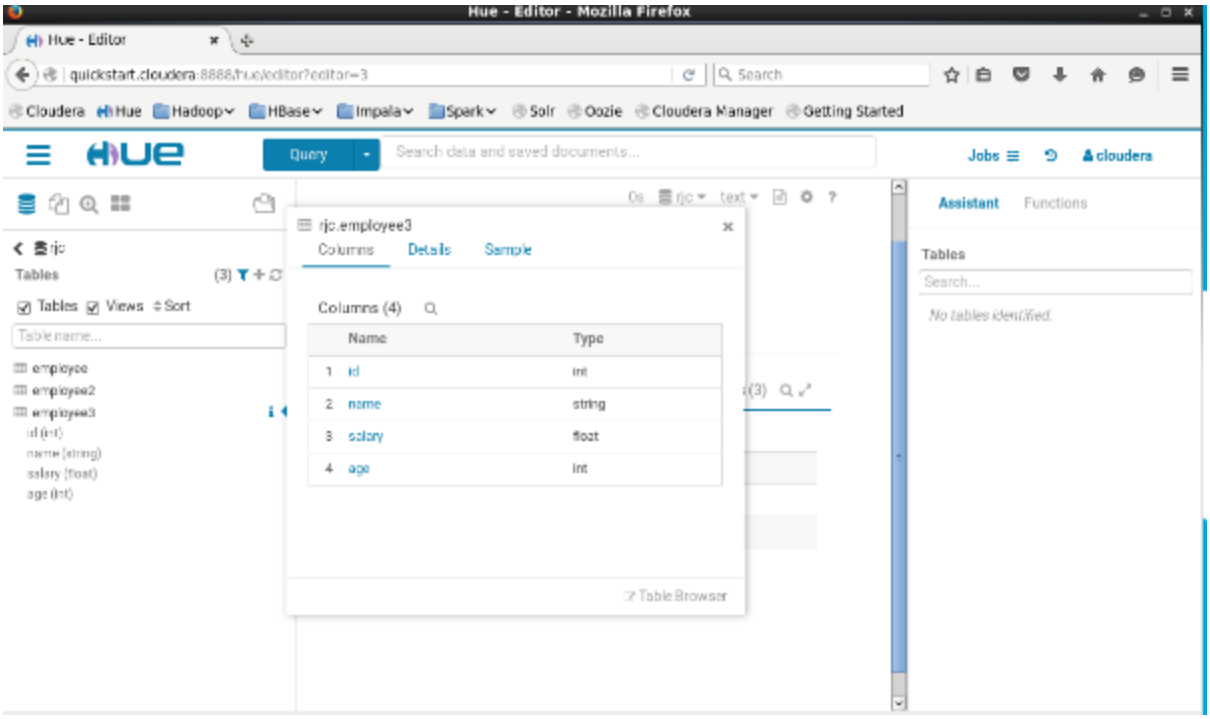


Listing out all tables

```
age                     int
Time taken: 0.104 seconds, Fetched: 4 row(s)
hive> show tables;
OK
employee
employee2
employee3
Time taken: 0.044 seconds, Fetched: 3 row(s)
hive>
```

Alter table

```
Time taken: 0.044 seconds, Fetched: 3 row(s)
hive> alter table employee3 RENAME to emptable;
OK
Time taken: 0.219 seconds
hive>
```

Show tables after altering

```
Time taken: 0.219 seconds
hive> show tables;
OK
employee
employee2
emptable
Time taken: 0.024 seconds, Fetched: 3 row(s)
hive>
```

describe emptable;

Alter table emptable add columns (surname string);

describe emptable;

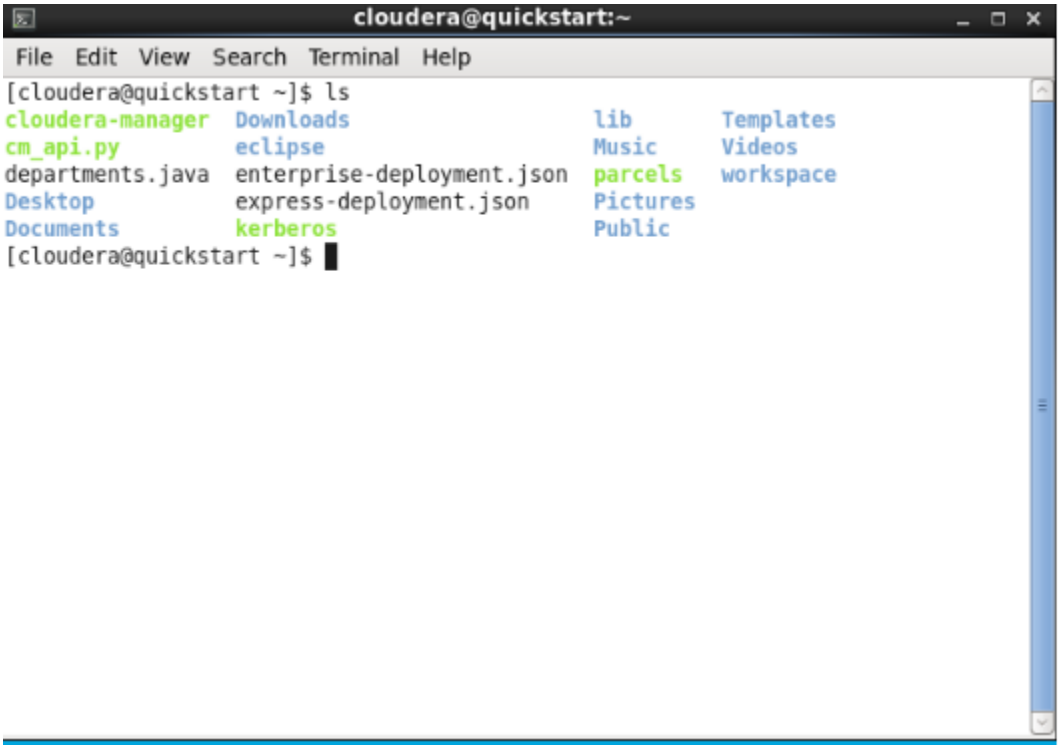
```
Time taken: 0.024 seconds, Fetched: 3 row(s)
hive> describe emptable;
OK
id                      int
name                    string
salary                  float
age                     int
Time taken: 0.105 seconds, Fetched: 4 row(s)

hive> Alter table emptable add columns (surname string);
OK
Time taken: 0.173 seconds
hive> describe emptable;
OK
id                      int
name                    string
salary                  float
age                     int
surname                 string
Time taken: 0.155 seconds, Fetched: 5 row(s)
hive>
```

Alter table emptable change name first_name string;

describe emptable;

```
hive> Alter table emptable change name first_name string;
OK
Time taken: 0.203 seconds
hive> describe emptable;
OK
id                      int
first_name              string
salary                  float
age                     int
surname                 string
Time taken: 0.109 seconds, Fetched: 5 row(s)
hive>
```

Loading the data in the table



gedit command

```
[cloudera@quickstart Desktop]$ gedit Student.csv
```

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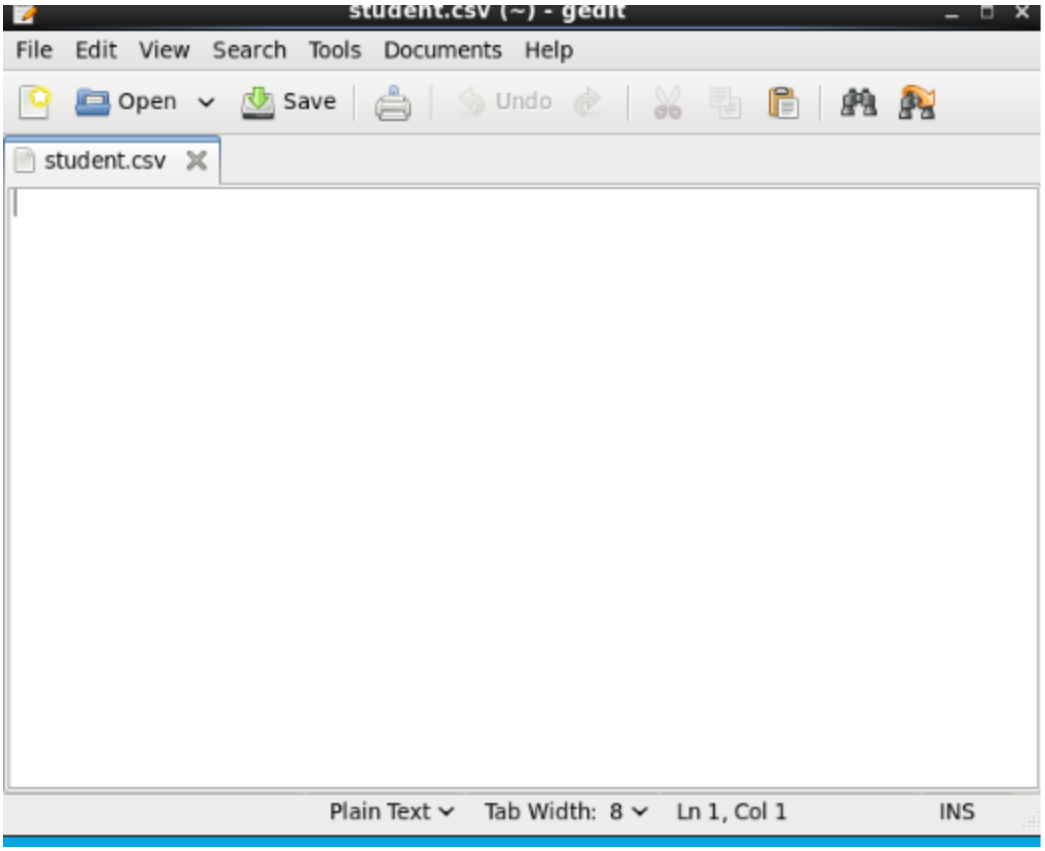
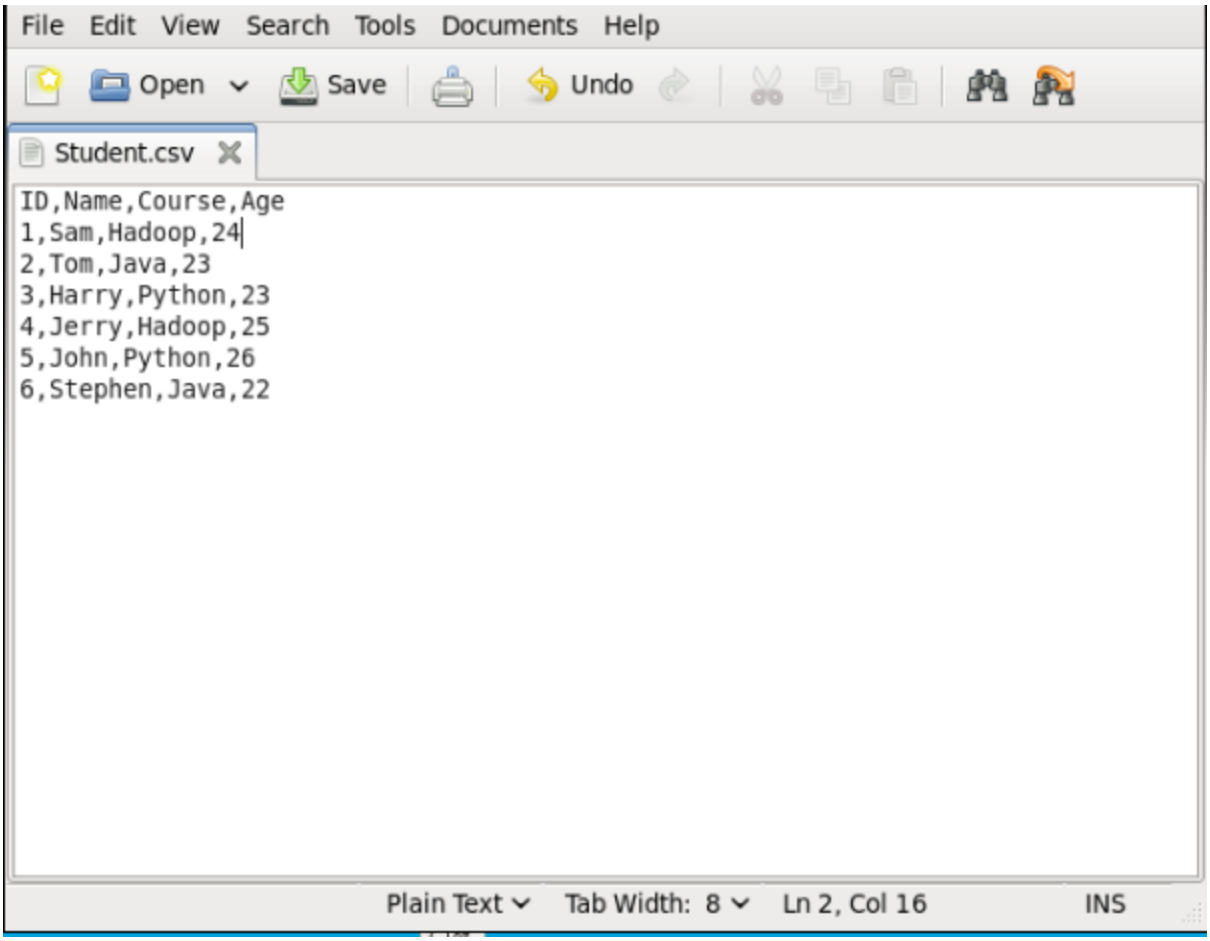


Inset data in student.csv file



create database rjcstudent;
show databases;

```
Time taken: 0.109 seconds, Fetched: 5 row(s)
hive> create database rjcstudent;
OK
Time taken: 0.088 seconds
hive> show databases;
OK
default
rjc
rjc_joins
rjcstudent
Time taken: 0.026 seconds, Fetched: 4 row(s)
hive>
```

Use rjcstudent;

```
Time taken: 0.026 seconds, Fetched: 4 row(s)
hive> use rjcstudent;
OK
Time taken: 0.03 seconds
hive>
```

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Use rjcstudent;

Create table student

```
hive> use rjcstudent;
OK
Time taken: 0.03 seconds
hive> create table student (ID int,Name string,Age int)
    > partitioned by(Course string)
    > row format delimited
    > fields terminated by ',';
OK
Time taken: 0.093 seconds
hive>
```

Describe Student

```
Time taken: 0.093 seconds
hive> describe student;
OK
id                      int
name                    string
age                     int
course                  string

# Partition Information
# col_name              data_type               comment

course                  string
Time taken: 0.464 seconds, Fetched: 9 row(s)
hive>
```

```
hive> load data local inpath '/home/cloudera/Desktop' into table student
    > partition(Course="Hadoop")
    > ;
Loading data to table rjcstudent.student partition (course=Hadoop)
Partition rjcstudent.student{course=Hadoop} stats: [numFiles=10, numRows=0, totalSize=26158, rawDataSi
ze=0]
OK
Time taken: 1.436 seconds
hive>
```

Select * from Student

```
NULL    NULL    NULL    Hadoop
4500    NULL    NULL    Hadoop
NULL     Fetched: 1 row(s)      NULL    Hadoop
NULL    NULL    NULL    Hadoop
NULL    Name    NULL    Hadoop
1       Sam     NULL    Hadoop
2       tom     NULL    Hadoop
3       harry   NULL    Hadoop
4       jerry   NULL    Hadoop
5       john    NULL    Hadoop
6       stephen NULL    Hadoop
Time taken: 0.092 seconds, Fetched: 507 row(s)
hive>
```

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```
Loading data to table rjcstudent.student partition (course=Java)
Partition rjcstudent.student{course=Java} stats: [numFiles=1, numRows=0, totalSize=121, ra
wDataSize=0]
OK
Time taken: 1.276 seconds
hive>
```

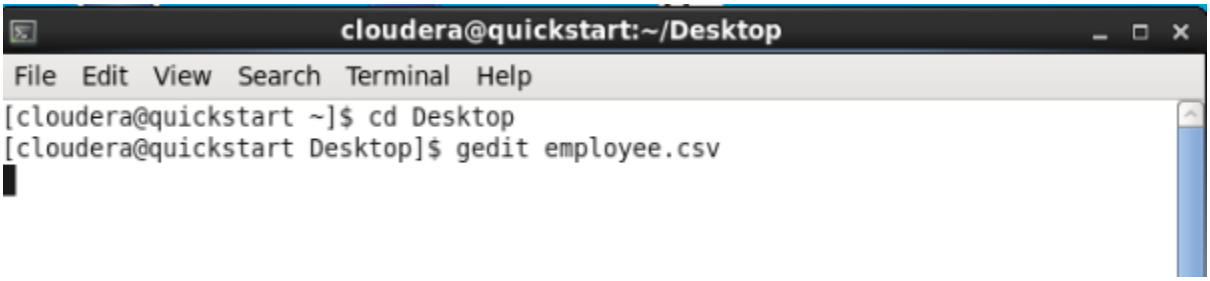
Again Create Table Student

```
hive> create table student(ID int,Name String,Course string,Age int)
    > row format delimited
    > fields terminated by ','
    > tblproperties("skip.header.line.count"="1");
OK
Time taken: 0.217 seconds
hive>
```

Select * from student

```
hive> select  * from student
    > ;
OK
1       Sam     Hadoop  24
2       Tom     Java    23
3       Harry   Python  23
4       Jerry   Hadoop  NULL
5       John    Python  26
6       Stephen Java    22
Time taken: 0.19 seconds, Fetched: 6 row(s)
```

Gedit employee.csv



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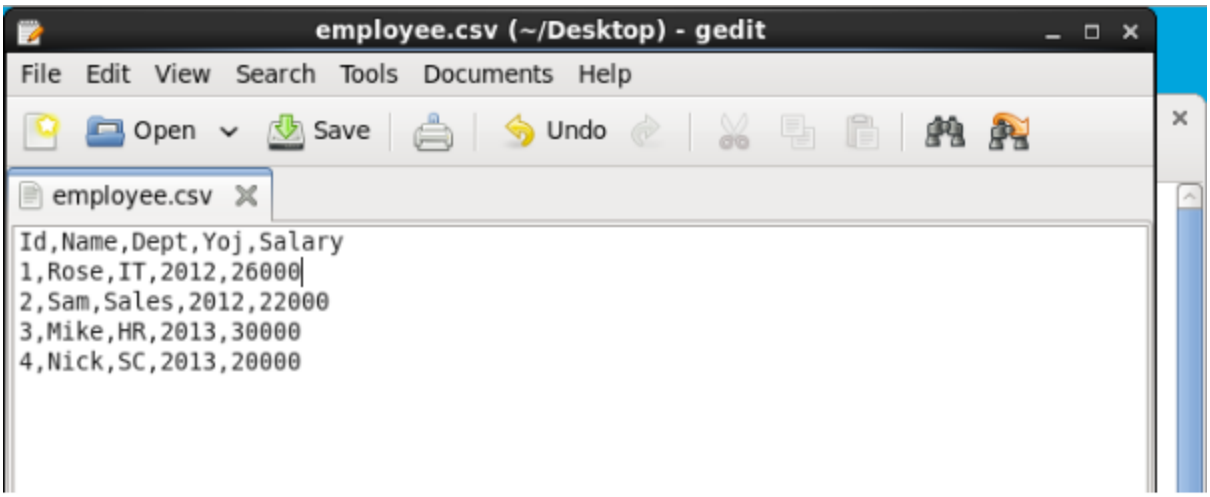

Create database hiveeql

```
hive> create database hiveeql;
OK
Time taken: 0.15 seconds
hive>
```

```
hive> create table employee(ID int,Name string,Department string,Yoj int,Salary float)
    > row format delimited
    > fields terminated by ','
    > tblproperties("skip.header.linr.count"="1");
OK
Time taken: 0.831 seconds
hive>
```

Describe employee

```
Time taken: 0.831 seconds
hive> describe employee;
OK
id                      int
name                    string
department              string
yoj                     int
salary                  float
Time taken: 0.414 seconds, Fetched: 5 row(s)
hive>
```

Select * from employee

```
hive> load data local inpath '/home/cloudera/Desktop/employee.csv' into table employee;
Loading data to table rjcstudent.employee
Table rjcstudent.employee stats: [numFiles=1, totalSize=110]
OK
Time taken: 0.734 seconds
hive> select * from employee;
OK
NULL    Name    Dept    NULL    NULL
1       Rose    IT      2012    26000.0
2       Sam     Sales   2012    22000.0
3       Mike    HR      2013    30000.0
4       Nick    SC      2013    20000.0
Time taken: 0.143 seconds, Fetched: 5 row(s)
```

select * from employee where salary >=25000;

```
Time taken: 0.227 seconds, Fetched: 5 row(s)
hive> select * from employee where salary>=25000;
OK
1       Rose    It      2012    26000.0
3       Mike    Hr      2013    30000.0
Time taken: 0.456 seconds, Fetched: 2 row(s)
hive>
```

select * from employee where salary <=25000;

```
Time taken: 0.456 seconds, Fetched: 2 row(s)
hive> select * from employee where salary<=25000;
OK
2       Sam     Sales   2012    22000.0
4       Nick    Sc      2013    20000.0
Time taken: 0.351 seconds, Fetched: 2 row(s)
hive>
```

Aggregating

41.Arithmetic operations:

select ID, name, salary + 5000 from employee;

```
Time taken: 0.351 seconds, Fetched: 2 row(s)
hive> select ID,name,salary+5000 from employee;
OK
NULL    Name    NULL
1       Rose    31000.0
2       Sam     27000.0
3       Mike    35000.0
4       Nick    25000.0
Time taken: 0.295 seconds, Fetched: 5 row(s)
hive>
```

select max(salary) from employee;

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```
hive> select max(salary)from employee;
Query ID = cloudera_20220321063636_14d659b3-6489-419f-8b62-cde90056bc2f
Total jobs = 1
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 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>
Starting Job = job_1646550420897_0018, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0018/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0018
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 06:37:10,875 Stage-1 map = 0%,  reduce = 0%
2022-03-21 06:37:31,219 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 2.12 sec
2022-03-21 06:37:45,854 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 4.29 sec
MapReduce Total cumulative CPU time: 4 seconds 290 msec
Ended Job = job_1646550420897_0018
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 4.29 sec   HDFS Read: 7930 HDFS Write: 8 SUCCESS
Total MapReduce CPU Time Spent: 4 seconds 290 msec
OK
```

```
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 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>
Starting Job = job_1646550420897_0018, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0018/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0018
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 06:37:10,875 Stage-1 map = 0%,  reduce = 0%
2022-03-21 06:37:31,219 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 2.12 sec
2022-03-21 06:37:45,854 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 4.29 sec
MapReduce Total cumulative CPU time: 4 seconds 290 msec
Ended Job = job_1646550420897_0018
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 4.29 sec   HDFS Read: 7930 HDFS Write: 8 SUCCESS
Total MapReduce CPU Time Spent: 4 seconds 290 msec
OK
30000.0
Time taken: 68.323 seconds, Fetched: 1 row(s)
hive>
```

select min(salary) from employee;

```
Time taken: 68.323 seconds, Fetched: 1 row(s)
hive> select min(salary)from employee;
Query ID = cloudera_20220321064242_a9d4da75-3de1-41d2-bbfa-c9d76e102b9c
Total jobs = 1
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 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>
Starting Job = job_1646550420897_0019, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0019/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0019
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 06:42:40,367 Stage-1 map = 0%,  reduce = 0%
2022-03-21 06:42:51,562 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.57 sec
2022-03-21 06:43:03,892 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.54 sec
MapReduce Total cumulative CPU time: 3 seconds 540 msec
Ended Job = job_1646550420897_0019
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.54 sec   HDFS Read: 8016 HDFS Write: 8 SUCCESS
Total MapReduce CPU Time Spent: 3 seconds 540 msec
```

Select ID, name, sqrt(salary) from employee;

```
20000.0
Time taken: 37.051 seconds, Fetched: 1 row(s)
hive> select ID,lower(name)from employee;
OK
NULL    name
1       rose
2       sam
3       mike
4       nick
Time taken: 0.08 seconds, Fetched: 5 row(s)
hive>
```

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```
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 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>
Starting Job = job_1646550420897_0019, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0019/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0019
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 06:42:40,367 Stage-1 map = 0%,  reduce = 0%
2022-03-21 06:42:51,562 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.57 sec
2022-03-21 06:43:03,892 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.54 sec
MapReduce Total cumulative CPU time: 3 seconds 540 msec
Ended Job = job_1646550420897_0019
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.54 sec   HDFS Read: 8016 HDFS Write: 8 SUCCESS
Total MapReduce CPU Time Spent: 3 seconds 540 msec
OK
20000.0
Time taken: 37.051 seconds, Fetched: 1 row(s)
hive>
```

Select ID, name, sqrt(salary) from employee;

```
hive> select ID,name,sqrt(salary)from employee;
OK
NULL    Name    NULL
1       Rose    161.24515496597098
2       Sam     148.32396974191326
3       Mike    173.20508075688772
4       Nick    141.4213562373095
Time taken: 0.334 seconds, Fetched: 5 row(s)
```

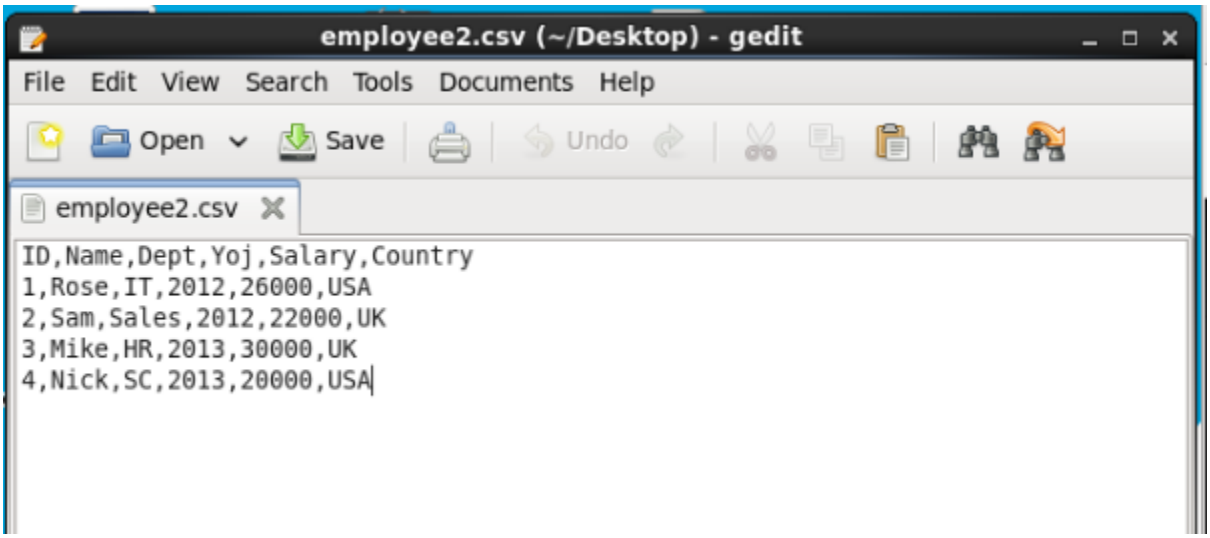
select ID, upper(name) from employee;

```
hive> select ID,upper(name)from employee;
OK
NULL    NAME
1       ROSE
2       SAM
3       MIKE
4       NICK
Time taken: 0.206 seconds, Fetched: 5 row(s)
```

select ID, lower(name) from employee;

```
Time taken: 0.206 seconds, Fetched: 5 row(s)
hive> select ID,lower(name)from employee;
OK
NULL    name
1       rose
2       sam
3       mike
4       nick
Time taken: 0.165 seconds, Fetched: 5 row(s)
hive>
```

Creating a new table as empgroup.




```
hive> create table empgroup(ID int,Name string,Dept string,yoj int,salary float,Country st
ring)
    > row format delimited
    > fields terminated by ','
    > tblproperties("skip.header.line.count"="1");
OK
```

select * from empgroup;

```
Time taken: 0.055 seconds
hive> load data local inpath '/home/cloudera/Desktop/employee2.csv' into table empgroup;
Loading data to table default.empgroup
Table default.empgroup stats: [numFiles=1, totalSize=132]
OK
Time taken: 0.379 seconds
hive> select * from empgroup;
OK
1       Rose    It      2012    26000.0 USA
2       Sam     Sales   2012    22000.0 UK
3       Mike    Hr      2013    30000.0 UK
4       Nick    Sc      2013    20000.0 USA
Time taken: 0.067 seconds, Fetched: 4 row(s)
hive>
```

Groupby clause

select country, sum(salary) from empgroup group by country;

```
4       Nick    Sc      2013    20000.0 USA
Time taken: 0.067 seconds, Fetched: 4 row(s)
hive> select country,sum(salary)from empgroup group by country;
Query ID = cloudera_20220321070202_dc7f91cc-5208-4aa7-85fd-48e63ae6459f
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>
Starting Job = job_1646550420897_0020, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0020/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0020
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 07:02:16,122 Stage-1 map = 0%,  reduce = 0%
2022-03-21 07:02:28,232 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.59 sec
2022-03-21 07:02:39,452 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.52 sec
MapReduce Total cumulative CPU time: 3 seconds 520 msec
Ended Job = job_1646550420897_0020
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.52 sec   HDFS Read: 8597 HDFS Write: 23 SUCCESS
```

```
File  Edit  View  Search  Terminal  Help
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>
Starting Job = job_1646550420897_0020, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0020/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0020
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 07:02:16,122 Stage-1 map = 0%,  reduce = 0%
2022-03-21 07:02:28,232 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.59 sec
2022-03-21 07:02:39,452 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.52 sec
MapReduce Total cumulative CPU time: 3 seconds 520 msec
Ended Job = job_1646550420897_0020
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.52 sec   HDFS Read: 8597 HDFS Write: 23 SUCCESS
Total MapReduce CPU Time Spent: 3 seconds 520 msec
OK
UK      52000.0
USA     46000.0
Time taken: 38.43 seconds, Fetched: 2 row(s)
hive>
```

Groupby clause along with the having clause

select country, sum(salary) from empgroup group by country having sum(salary)>50000;

```
File  Edit  View  Search  Terminal  Help
hive> select country,sum(salary)from empgroup group by country having sum(salary)>50000;
Query ID = cloudera_20220321070505_1d5211be-3f8f-446b-8275-a706bca4b949
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>
Starting Job = job_1646550420897_0021, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0021/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0021
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 07:05:57,625 Stage-1 map = 0%,  reduce = 0%
2022-03-21 07:06:08,860 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.58 sec
2022-03-21 07:06:22,012 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.97 sec
MapReduce Total cumulative CPU time: 3 seconds 970 msec
Ended Job = job_1646550420897_0021
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.97 sec   HDFS Read: 9099 HDFS Write: 11 SUCCESS
Total MapReduce CPU Time Spent: 3 seconds 970 msec
OK
```

```
File  Edit  View  Search  Terminal  Help
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>
Starting Job = job_1646550420897_0021, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0021/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0021
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 07:05:57,625 Stage-1 map = 0%,  reduce = 0%
2022-03-21 07:06:08,860 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.58 sec
2022-03-21 07:06:22,012 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.97 sec
MapReduce Total cumulative CPU time: 3 seconds 970 msec
Ended Job = job_1646550420897_0021
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.97 sec   HDFS Read: 9099 HDFS Write: 11 SUCCESS
Total MapReduce CPU Time Spent: 3 seconds 970 msec
OK
UK      52000.0
Time taken: 37.793 seconds, Fetched: 1 row(s)
hive>
```

Sorting : Order by

Select * from empgroup order by salary desc;

```
UK      52000.0
Time taken: 37.793 seconds, Fetched: 1 row(s)
hive> select * from empgroup order by salary desc;
Query ID = cloudera_20220321070808_419ecd0d-b165-441c-a777-ba56e105e830
Total jobs = 1
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 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>
Starting Job = job_1646550420897_0022, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0022/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0022
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 07:08:26,859 Stage-1 map = 0%,  reduce = 0%
2022-03-21 07:08:38,059 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.68 sec
2022-03-21 07:08:51,276 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.67 sec
MapReduce Total cumulative CPU time: 3 seconds 670 msec
Ended Job = job_1646550420897_0022
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.67 sec   HDFS Read: 8585 HDFS Write: 108 SUCCES
```

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```
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>
Starting Job = job_1646550420897_0022, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0022/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0022
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 07:08:26,859 Stage-1 map = 0%,  reduce = 0%
2022-03-21 07:08:38,059 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.68 sec
2022-03-21 07:08:51,276 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.67 sec
MapReduce Total cumulative CPU time: 3 seconds 670 msec
Ended Job = job_1646550420897_0022
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.67 sec   HDFS Read: 8585 HDFS Write: 108 SUCCES
S
Total MapReduce CPU Time Spent: 3 seconds 670 msec
OK
3       Mike    Hr      2013    30000.0 UK
1       Rose    It      2012    26000.0 USA
2       Sam     Sales   2012    22000.0 UK
4       Nick    Sc      2013    20000.0 USA
Time taken: 38.503 seconds, Fetched: 4 row(s)
hive>
```

Select * from empgroup sort by salary desc;

```
4       Nick    Sc      2013    20000.0 USA
Time taken: 38.503 seconds, Fetched: 4 row(s)
hive> select * from empgroup sort by salary desc;
Query ID = cloudera_20220321071010_71dac3d5-6a60-4cc2-b350-6bf39b3a8f42
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>
Starting Job = job_1646550420897_0023, Tracking URL = http://quickstart.cloudera:8088/proxy/applicat
ion_1646550420897_0023/
Kill Command = /usr/lib/hadoop/bin/hadoop job  -kill job_1646550420897_0023
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2022-03-21 07:10:44,595 Stage-1 map = 0%,  reduce = 0%
2022-03-21 07:10:54,567 Stage-1 map = 100%,  reduce = 0%, Cumulative CPU 1.48 sec
2022-03-21 07:11:08,670 Stage-1 map = 100%,  reduce = 100%, Cumulative CPU 3.46 sec
MapReduce Total cumulative CPU time: 3 seconds 460 msec
Ended Job = job_1646550420897_0023
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1  Reduce: 1   Cumulative CPU: 3.46 sec   HDFS Read: 8585 HDFS Write: 108 SUCCES
```

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