Assignment: Practice "Advance HBase codes" present in the LMS.

Solution

Start HBase shell, Run below command in HBase shell:

hbase(main):012:0> create 'customers_anish','info_anish'
0 row(s) in 1.2150 seconds
=> Hbase::Table - customers_anish

Copy the custs file on HDFS
hdfs dfs -put custs

Run the below commands in the terminal (web console):

HADOOP_CLASSPATH=`${HBASE_HOME}/bin/hbase classpath` hadoop jar
/opt/cloudera/parcels/CDH/lib/hbase/hbase-server-1.2.0-cdh5.11.1.jar importtsv
Dimporttsv.separator=, -Dimporttsv.bulk.output=output
Dimporttsv.columns=HBASE_ROW_KEY,info:id,info:fname,info:lname,info:age,info:
prof customers_anish custs

HADOOP_CLASSPATH=`${HBASE_HOME}/bin/hbase classpath` hadoop jar
/opt/cloudera/parcels/CDH/lib/hbase/hbase-server-1.2.0-cdh5.11.1.jar
completebulkload output customers_anish

Run Hbase shell, run below command. You should get all the rows which got loaded
n the table:
scan 'customers_anish'

====Version====
hbase(main):001:0> version
1.2.0-cdh5.11.1, rUnknown, Thu Jun 1 10:19:43 PDT 2017

====Create table 'custMarch09_anish with column family address and order====
hbase(main):001:0> create 'custMarch09_anish','address','order'
0 row(s) in 1.4980 seconds
=> Hbase::Table - custMarch09_anish
hbase(main):002:0>

===== Inserting data ===
hbase(main):001:0> put 'custMarch09_anish','john','address:city','Boston'0 row(s) in 0.2230 seconds

hbase(main):002:0> put 'custMarch09_anish','john','address:state','Mashitushes'0 row(s) in 0.0060 seconds
hbase(main):003:0> put 'custMarch09_anish','john','address:street','street1'0 row(s) in 0.0050 seconds

hbase(main):004:0> put 'custMarch09_anish','john','order:number','ORD-15'0 row(s) in 0.0020 seconds
hbase(main):005:0> put 'custMarch09_anish','john','order:amount','15'0 row(s) in 0.0020 seconds

hbase(main):006:0> put 'custMarch09_anish','Finch','address:city','Newyork'
0 row(s) in 0.0060 seconds

hbase(main):007:0> put 'custMarch09_anish','Finch','address:state','Newyork'
0 row(s) in 0.0010 seconds

hbase(main):008:0> put 'custMarch09_anish','Finch','order:number','ORD-16'
0 row(s) in 0.0020 seconds

```
hbase(main):009:0> put 'custMarch09_anish','Finch','order:amount','15'
0 row(s) in 0.0020 seconds
```

=== Retrive data===
```
hbase(main):010:0> get 'custMarch09_anish','john'
COLUMN                      CELL
 address:city               timestamp=1520688134213, value=Boston
 address:state              timestamp=1520688173871, value=Mashitushes
 address:street             timestamp=1520688173894, value=street1
 order:amount               timestamp=1520688173935, value=15
 order:number               timestamp=1520688173911, value=ORD-15
5 row(s) in 0.0120 seconds


hbase(main):012:0* get 'custMarch09_anish','john','address'
COLUMN                      CELL
 address:city               timestamp=1520688134213, value=Boston
 address:state              timestamp=1520688173871, value=Mashitushes
 address:street             timestamp=1520688173894, value=street1
3 row(s) in 0.0030 seconds
hbase(main):013:0> get 'custMarch09_anish','john','address:city'
COLUMN                      CELL
 address:city               timestamp=1520688134213, value=Boston
1 row(s) in 0.0020 seconds
```

=== scanning table ====
```
hbase(main):001:0> scan 'custMarch09_anish'
ROW                     COLUMN+CELL
 Finch                  column=address:city, timestamp=1520688247780,
value=Newyork
 Finch                  column=address:state, timestamp=1520688247794,
value=Newyork
 Finch                  column=order:amount, timestamp=1520688247813,
value=15
 Finch                  column=order:number, timestamp=1520688247804,
value=ORD-16
 john                   column=address:city, timestamp=1520688134213,
value=Boston
 john                   column=address:state, timestamp=1520688173871,
value=Mashitushes
 john                   column=address:street, timestamp=1520688173894,
value=street1
 john                   column=order:amount, timestamp=1520688173935,
value=15
 john                   column=order:number, timestamp=1520688173911,
value=ORD-15
2 row(s) in 0.2000 seconds
```

=== deleting column family address:city for john===
```
delete 'custMarch09_anish','john','address:city'
```

0 row(s) in 0.0300 seconds

=== deleting column family from table==
hbase(main):005:0> alter 'custMarch09_anish', 'delete' => 'address'
Updating all regions with the new schema...
1/1 regions updated.
Done.
0 row(s) in 1.9300 seconds

hbase(main):006:0> alter 'custMarch09_anish', {NAME=>'address'}
Updating all regions with the new schema...
1/1 regions updated.
Done.
0 row(s) in 1.8810 seconds

===Creating Versions===
hbase(main):007:0> create 't1', {NAME=>'f1', VERSIONS=>3}
0 row(s) in 1.2360 seconds
=> Hbase::Table - t1
hbase(main):008:0> count 'custMarch09_anish'
2 row(s) in 0.0220 seconds
=> 2
hbase(main):009:0>
hbase(main):010:0* alter 'custMarch09_anish',NAME=>'address',VERSIONS=>5
Updating all regions with the new schema...
1/1 regions updated.
Done.
0 row(s) in 1.8820 seconds

hbase(main):011:0> put 'custMarch09_anish','Finch','address:city','Newyork'
0 row(s) in 0.0310 seconds
hbase(main):012:0> put 'custMarch09_anish','Finch','address:city','Detroit'
0 row(s) in 0.0010 seconds
hbase(main):013:0> put 'custMarch09_anish','Finch','address:city','Sanfranscisco'
0 row(s) in 0.0020 seconds

hbase(main):014:0> scan
'custMarch09_anish',{COLUMN=>'address:city',VERSIONS=>2}
ROW   COLUMN+CELL
 Finch   column=address:city, timestamp=1520688774983,
value=Sanfranscisco
 Finch   column=address:city, timestamp=1520688774969,
value=Detroit
1 row(s) in 0.0110 seconds
hbase(main):015:0>
hbase(main):016:0* scan
'custMarch09_anish',{COLUMN=>'address:city',VERSIONS=>1}
ROW   COLUMN+CELL
 Finch   column=address:city, timestamp=1520688774983,
value=Sanfranscisco

1 row(s) in 0.0030 seconds
hbase(main):017:0> scan
'custMarch09_anish',{COLUMN=>'address:city',VERSIONS=>3}
ROW   COLUMN+CELL
 Finch   column=address:city, timestamp=1520688774983,
value=Sanfranscisco
 Finch   column=address:city, timestamp=1520688774969,
value=Detroit
 Finch   column=address:city, timestamp=1520688774950,
value=Newyork
1 row(s) in 0.0030 seconds

=== Disable table===
hbase(main):001:0> disable 'custMarch09_anish'
0 row(s) in 2.4610 seconds

==== Drop table ====

hbase(main):002:0> drop 'custMarch09_anish'
0 row(s) in 1.2280 seconds