

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 in the table:
scan 'customers_anish'

```

you must specify at most one column as timestamp key for each imported record.
hbase(main):001:0> scan 'customers_pooja'
ROW COLUMN+CELL
4000001 column=info_pooja:age, timestamp=1520674114037, value=Pilot
4000001 column=info_pooja:fname, timestamp=1520674114037, value=Chung
4000001 column=info_pooja:id, timestamp=1520674114037, value=Kristina
4000001 column=info_pooja:lname, timestamp=1520674114037, value=55
4000002 column=info_pooja:age, timestamp=1520674114037, value=Teacher
4000002 column=info_pooja:fname, timestamp=1520674114037, value=Chen
4000002 column=info_pooja:id, timestamp=1520674114037, value=Paige
4000002 column=info_pooja:lname, timestamp=1520674114037, value=74
4000003 column=info_pooja:age, timestamp=1520674114037, value=Firefighter
4000003 column=info_pooja:fname, timestamp=1520674114037, value=Melton
4000003 column=info_pooja:id, timestamp=1520674114037, value=Sherri
4000003 column=info_pooja:lname, timestamp=1520674114037, value=34
4000004 column=info_pooja:age, timestamp=1520674114037, value=Computer hardware engineer
4000004 column=info_pooja:fname, timestamp=1520674114037, value=Hill
4000004 column=info_pooja:id, timestamp=1520674114037, value=Gretchen
4000004 column=info_pooja:lname, timestamp=1520674114037, value=66
4000005 column=info_pooja:age, timestamp=1520674114037, value=Lawyer
4000005 column=info_pooja:fname, timestamp=1520674114037, value=Puckett
4000005 column=info_pooja:id, timestamp=1520674114037, value=Karen
4000005 column=info_pooja:lname, timestamp=1520674114037, value=74
4000006 column=info_pooja:age, timestamp=1520674114037, value=Veterinarian
4000006 column=info_pooja:fname, timestamp=1520674114037, value=Song
4000006 column=info_pooja:id, timestamp=1520674114037, value=Patrick
4000006 column=info_pooja:lname, timestamp=1520674114037, value=42
4000007 column=info_pooja:age, timestamp=1520674114037, value=Pilot
4000007 column=info_pooja:fname, timestamp=1520674114037, value=Hamilton
4000007 column=info_pooja:id, timestamp=1520674114037, value=Elsie
4000007 column=info_pooja:lname, timestamp=1520674114037, value=43
4000008 column=info_pooja:age, timestamp=1520674114037, value=Carpenter
4000008 column=info_pooja:fname, timestamp=1520674114037, value=Bender
4000008 column=info_pooja:id, timestamp=1520674114037, value=Hazel
4000008 column=info_pooja:lname, timestamp=1520674114037, value=63

```

====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=>'t1', 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=Sanfransciso
  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
```