

Name: Pooja Pathak

Practical no: 8

MSc DSAI Part 1 – Sem 2

```
[root@quickstart cloudera]# hbase shell
2022-03-24 19:57:44,498 INFO [main] Configuration.deprecation: hadoop.native.lib
is deprecated. Instead, use io.native.lib.available
HBase Shell; enter 'help<RETURN>' for list of supported commands.
Type "exit<RETURN>" to leave the HBase Shell
Version 1.0.0-cdh5.4.2, rUnknown, Tue May 19 17:07:29 PDT 2015

hbase(main):001:0> list
TABLE
0 row(s) in 0.2610 seconds
```

```
hbase(main):002:0> create 'customer', 'address','order'
0 row(s) in 1.4300 seconds

=> Hbase::Table - customer
hbase(main):003:0> list
TABLE
customer
1 row(s) in 0.0030 seconds

=> ["customer"]
```

```
hbase(main):004:0> put 'customer','Nick','address:city','Mumbai'
0 row(s) in 0.4340 seconds

hbase(main):005:0> put 'customer','Nick','address:state','Maharashtra'
0 row(s) in 0.0090 seconds

hbase(main):006:0> put 'customer','Nick','address:street','Steet1'
0 row(s) in 0.0110 seconds

hbase(main):007:0> put 'customer','Nick','order:number','ORD-15'
0 row(s) in 0.0080 seconds

hbase(main):008:0> put 'customer','Nick','order:amount','50'
0 row(s) in 0.0090 seconds
```

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```
hbase(main):009:0> get 'customer', 'Nick'
COLUMN                                CELL
address:city                          timestamp=1648177267650, value=Mumbai
address:state                          timestamp=1648177277732, value=Maharashtra
address:street                         timestamp=1648177333270, value=Steet1
order:amount                           timestamp=1648177361907, value=50
order:number                           timestamp=1648177349416, value=ORD-15
5 row(s) in 0.0340 seconds
```

```
hbase(main):013:0> get 'customer', 'justin'
COLUMN                                CELL
address:address                       timestamp=1648178620085, value=Maharashtra
address:city                           timestamp=1648178574161, value=Pune
order:amount                           timestamp=1648178236590, value=60
order:number                           timestamp=1648178207179, value=ORD-16
4 row(s) in 0.0100 seconds
```

```
hbase(main):014:0> █
```

```
hbase(main):015:0> get 'customer', 'Nick' , 'address:city'
COLUMN                                CELL
address:city                          timestamp=1648177267650, value=Mumbai
1 row(s) in 0.0350 seconds
```

```
hbase(main):016:0> █
```

```
hbase(main):015:0> get 'customer', 'Nick' , 'address:city'
COLUMN                                CELL
address:city                          timestamp=1648177267650, value=Mumbai
1 row(s) in 0.0350 seconds
```

```
hbase(main):016:0> scan 'customer'
ROW                                    COLUMN+CELL
Justin                                column=address:city, timestamp=1648177690285, value=Pune
Nick                                  column=address:city, timestamp=1648177267650, value=Mumbai
Nick                                  column=address:state, timestamp=1648177277732, value=Maharashtra
Nick                                  column=address:street, timestamp=1648177333270, value=Steet1
Nick                                  column=order:amount, timestamp=1648177361907, value=50
Nick                                  column=order:number, timestamp=1648177349416, value=ORD-15
justin                                column=address:address, timestamp=1648178620085, value=Maharashtra
justin                                column=address:city, timestamp=1648178574161, value=Pune
justin                                column=order:amount, timestamp=1648178236590, value=60
justin                                column=order:number, timestamp=1648178207179, value=ORD-16
3 row(s) in 0.1220 seconds
```

```
hbase(main):017:0> █
```

```
hbase(main):017:0> delete 'customer', 'Nick' , 'address:street'
0 row(s) in 0.0290 seconds
```

```
hbase(main):018:0> █
```

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```
hbase(main):020:0> alter 'customer', 'delete' => 'address'
Updating all regions with the new schema...
0/1 regions updated.
1/1 regions updated.
Done.
0 row(s) in 2.2480 seconds

hbase(main):021:0> scan 'customer'
\ROW                                COLUMN+CELL
Nick                                column=order:amount, timestamp=1648177361907, value=50
Nick                                column=order:number, timestamp=1648177349416, value=ORD-15
justin                              column=order:amount, timestamp=1648178236590, value=60
justin                              column=order:number, timestamp=1648178207179, value=ORD-16
2 row(s) in 0.0130 seconds

hbase(main):022:0> █
```

```
hbase(main):022:0> desc 'customer'
Table customer is ENABLED
customer
COLUMN FAMILIES DESCRIPTION
{NAME => 'order', DATA_BLOCK_ENCODING => 'NONE', BLOOMFILTER => 'ROW', REPLICATION_SCOPE => '0', VERSIONS => '1', COMPRESSION => 'NONE', MIN_VERSIONS => '0', TTL => 'FOREVER', KEEP_DELETED_CELLS => 'FALSE', BLOCKSIZE => '65536', IN_MEMORY => 'false', BLOCKCACHE => 'true'}
1 row(s) in 0.0510 seconds

hbase(main):023:0> █
```

```
hbase(main):023:0> create 'customer1', {NAME => 'address', VERSIONS => 3}
0 row(s) in 1.4380 seconds

=> Hbase::Table - customer1
hbase(main):024:0> █
```

```
=> Hbase::Table - customer1
hbase(main):024:0> count 'customer'
2 row(s) in 0.0270 seconds

=> 2
hbase(main):025:0> █
```

```
hbase(main):025:0> alter 'customer' , NAME => 'address', VERSIONS =>5
Updating all regions with the new schema...
0/1 regions updated.
1/1 regions updated.
Done.
0 row(s) in 2.1780 seconds

hbase(main):026:0> █
```


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```
hbase(main):001:0> desc 'customer'
Table customer is ENABLED
customer
COLUMN FAMILIES DESCRIPTION
{NAME => 'address', DATA_BLOCK_ENCODING => 'NONE', BLOOMFILTER => 'ROW', REPLICATION_SCOPE => '0', COMPRESSION => 'NONE', VERSIONS => '5', TTL => 'FOREVER', MIN_VERSIONS => '0', KEEP_DELETED_CELLS => 'FALSE', BLOCKSIZE => '65536', IN_MEMORY => 'false', BLOOMCACHE => 'true'}
{NAME => 'order', DATA_BLOCK_ENCODING => 'NONE', BLOOMFILTER => 'ROW', REPLICATION_SCOPE => '0', VERSIONS => '1', COMPRESSION => 'NONE', MIN_VERSIONS => '0', TTL => 'FOREVER', KEEP_DELETED_CELLS => 'FALSE', BLOCKSIZE => '65536', IN_MEMORY => 'false', BLOOMCACHE => 'true'}
2 row(s) in 0.3120 seconds

hbase(main):002:0>
```

```
hbase(main):002:0> scan 'customer'
ROW COLUMN+CELL
Justin column=address:city, timestamp=1648177690285, value=Pune
Nick column=address:city, timestamp=1648177267650, value=Mumbai
Nick column=address:state, timestamp=1648177277732, value=Maharashtra
Nick column=order:amount, timestamp=1648177361907, value=50
Nick column=order:number, timestamp=1648177349416, value=ORD-15
justin column=address:address, timestamp=1648178620085, value=Maharashtra
justin column=address:city, timestamp=1648178574161, value=Pune
justin column=order:amount, timestamp=1648178236590, value=60
justin column=order:number, timestamp=1648178207179, value=ORD-16
3 row(s) in 0.1670 seconds

hbase(main):003:0>
```

```
hbase(main):003:0> put 'customer', 'Nick', 'address:city', 'Pune'
0 row(s) in 0.0690 seconds

hbase(main):004:0> put 'customer', 'Nick', 'address:city', 'Bangalore'
0 row(s) in 0.0110 seconds

hbase(main):005:0> put 'customer', 'Nick', 'address:city', 'Delhi'
0 row(s) in 0.0030 seconds

hbase(main):006:0> scan 'customer', {COLUMN=> 'address:city', VERSIONS => 2 }
ROW COLUMN+CELL
Justin column=address:city, timestamp=1648177690285, value=Pune
Nick column=address:city, timestamp=1648179750220, value=Delhi
Nick column=address:city, timestamp=1648179722103, value=Bangalore
justin column=address:city, timestamp=1648178574161, value=Pune
3 row(s) in 0.0490 seconds

hbase(main):007:0>
```

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```
hbase(main):007:0> scan 'customer', {COLUMN=> 'address:city', VERSIONS => 3}
ROW
Justin      column=address:city, timestamp=1648177690285, value=Pune
Nick        column=address:city, timestamp=1648179750220, value=Delhi
Nick        column=address:city, timestamp=1648179722103, value=Bangalore
Nick        column=address:city, timestamp=1648179688589, value=Pune
justin      column=address:city, timestamp=1648178574161, value=Pune
3 row(s) in 0.0490 seconds
```

```
hbase(main):008:0> scan 'customer', {COLUMN=> 'address:city', VERSIONS => 4}
ROW
Justin      column=address:city, timestamp=1648177690285, value=Pune
Nick        column=address:city, timestamp=1648179750220, value=Delhi
Nick        column=address:city, timestamp=1648179722103, value=Bangalore
Nick        column=address:city, timestamp=1648179688589, value=Pune
Nick        column=address:city, timestamp=1648177267650, value=Mumbai
justin      column=address:city, timestamp=1648178574161, value=Pune
3 row(s) in 0.0240 seconds
```

```
hbase(main):009:0> █
```

```
hbase(main):009:0> scan 'customer', {COLUMN=> 'address:city', VERSIONS => 5}
ROW
Justin      column=address:city, timestamp=1648177690285, value=Pune
Nick        column=address:city, timestamp=1648179750220, value=Delhi
Nick        column=address:city, timestamp=1648179722103, value=Bangalore
Nick        column=address:city, timestamp=1648179688589, value=Pune
Nick        column=address:city, timestamp=1648177267650, value=Mumbai
justin      column=address:city, timestamp=1648178574161, value=Pune
3 row(s) in 0.0170 seconds
```

```
hbase(main):010:0> █
```

```
hbase(main):010:0> scan 'customer', {VERSIONS => 5 }
ROW
Justin      column=address:city, timestamp=1648177690285, value=Pune
Nick        column=address:city, timestamp=1648179750220, value=Delhi
Nick        column=address:city, timestamp=1648179722103, value=Bangalore
Nick        column=address:city, timestamp=1648179688589, value=Pune
Nick        column=address:city, timestamp=1648177267650, value=Mumbai
Nick        column=address:state, timestamp=1648177277732, value=Maharashtra
Nick        column=order:amount, timestamp=1648177361907, value=50
Nick        column=order:number, timestamp=1648177349416, value=ORD-15
justin      column=address:address, timestamp=1648178620085, value=Maharashtra
justin      column=address:city, timestamp=1648178574161, value=Pune
justin      column=order:amount, timestamp=1648178236590, value=60
justin      column=order:number, timestamp=1648178207179, value=ORD-16
3 row(s) in 0.0420 seconds
```

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```
hbase(main):011:0> disable 'customer'
0 row(s) in 1.2230 seconds

hbase(main):012:0> drop 'customer'
0 row(s) in 0.1800 seconds
```

Example 2:

```
hbase(main):013:0> create 'emp', 'office'
0 row(s) in 0.1760 seconds

=> Hbase::Table - emp
hbase(main):014:0> list
TABLE
customer1
emp
2 row(s) in 0.0080 seconds

=> ["customer1", "emp"]
hbase(main):015:0> describe 'emp'
Table emp is ENABLED
emp
COLUMN FAMILIES DESCRIPTION
(NAME => 'office', DATA_BLOCK_ENCODING => 'NONE', BLOOMFILTER => 'ROW', REPLICATION_SCOPE => '0', VERSIONS => '1', COMPRESSION => 'NONE', MIN_VERSIONS => '0', TTL => 'FOREVER', KEEP_DELETED_CELLS => 'FALSE', BLOCKSIZE => '65536', IN_MEMORY => 'false', BLOCKCACHE => 'true')
1 row(s) in 0.0190 seconds
```

```
hbase(main):016:0> put 'emp', '1', 'office:name', 'Scott'
0 row(s) in 0.0110 seconds

hbase(main):017:0> put 'emp', '2', 'office:name', 'Mark'
0 row(s) in 0.0090 seconds

hbase(main):018:0> put 'emp', '2', 'office:gender', 'M'
0 row(s) in 0.0060 seconds

hbase(main):019:0> put 'emp', '2', 'office:age', '30'
0 row(s) in 0.0050 seconds

hbase(main):020:0> put 'emp', '2', 'office:age', '50'
0 row(s) in 0.0100 seconds

hbase(main):021:0> put 'emp', '3', 'office:name', 'Jeff'
0 row(s) in 0.0150 seconds

hbase(main):022:0> put 'emp', '3', 'office:salary', '30000'
0 row(s) in 0.0060 seconds

hbase(main):023:0> put 'emp', '1', 'office:age', '20'
0 row(s) in 0.0060 seconds

hbase(main):024:0> put 'emp', '3', 'office:age', '30'
```

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```
hbase(main):026:0> get 'emp','2'
COLUMN                                CELL
office:age                            timestamp=1648180496341, value=50
office:gender                          timestamp=1648180475596, value=M
office:name                            timestamp=1648180460340, value=Mark
3 row(s) in 0.0190 seconds

hbase(main):027:0> 
```

```
hbase(main):028:0> get 'emp','2' , {COLUMNS=>['office:age','office:name']}
COLUMN                                CELL
office:age                            timestamp=1648180496341, value=50
office:name                            timestamp=1648180460340, value=Mark
2 row(s) in 0.0070 seconds

hbase(main):029:0> 
```

```
hbase(main):029:0> disable 'emp'
0 row(s) in 1.1790 seconds

hbase(main):030:0> is_disabled 'emp'
true
0 row(s) in 0.0100 seconds
```

```
hbase(main):031:0> desc 'emp'
Table emp is DISABLED
emp
COLUMN FAMILIES DESCRIPTION
{NAME => 'office', DATA_BLOCK_ENCODING => 'NONE', BLOOMFILTER => 'ROW', REPLICATION_SCOPE => '0', VERSIONS => '1', COMPRESSION => 'NONE', MIN_VERSIONS => '0', TTL => 'FOREVER', KEEP_DELETED_CELLS => 'FALSE', BLOCKSIZE => '65536', IN_MEMORY => 'false', BLOCKCACHE => 'true'}
1 row(s) in 0.0160 seconds

hbase(main):032:0> 
```

```
hbase(main):034:0> disable 'emp'
0 row(s) in 1.1790 seconds

hbase(main):035:0> drop 'emp'
0 row(s) in 0.1730 seconds

hbase(main):036:0> 
```