

BIG DATA TECHNOLOGIES LAB

(ACADEMIC YEAR : 2017-2018)

I SEMESTER

ASSIGNMENT 7

TOPIC : APACHE HBASE

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~: HBASE :~

Ques1 Create a table customer_data.

```
student@student-OptiPlex-3020: ~
hbase(main):005:0> create 'cus_data','customer','sales'
0 row(s) in 2.3770 seconds

=> Hbase::Table - cus_data
hbase(main):006:0> list
TABLE
cus_data
1 row(s) in 0.0060 seconds

=> ["cus_data"]
hbase(main):007:0> 
```

Ques2 Insert the data in customer_data using appropriate command.

```
student@student-OptiPlex-3020: ~
hbase(main):009:0> put 'cus_data','1','customer:name','John White'
0 row(s) in 0.0610 seconds

hbase(main):010:0> put 'cus_data','2','customer:name','Jane Brown'
0 row(s) in 0.0120 seconds

hbase(main):011:0> put 'cus_data','3','customer:name','Bill Green'
0 row(s) in 0.0050 seconds

hbase(main):012:0> put 'cus_data','4','customer:name','Jack Black'
0 row(s) in 0.0090 seconds

hbase(main):013:0> put 'cus_data','1','customer:city','Los Angeles, CA'
0 row(s) in 0.0050 seconds

hbase(main):014:0> put 'cus_data','2','customer:city','Atlanta, GA'
0 row(s) in 0.0030 seconds

hbase(main):015:0> put 'cus_data','3','customer:city','Pittsburgh, PA'
0 row(s) in 0.0050 seconds

hbase(main):016:0> put 'cus_data','4','customer:city','St. Louis, MO'
0 row(s) in 0.0070 seconds

hbase(main):017:0> put 'cus_data','1','sales:product','Chairs'
0 row(s) in 0.0060 seconds
```

```
student@student-OptiPlex-3020: ~
hbase(main):024:0> put 'cus_data','4','sales:amount','$1,600.00'
0 row(s) in 0.0070 seconds

hbase(main):025:0> scan 'cus_data'
ROW          COLUMN+CELL
1            column=customer:city, timestamp=1514025837234, value=Los A
ngeles, CA
1            column=customer:name, timestamp=1514025714324, value=John
White
1            column=sales:amount, timestamp=1514026150788, value=$400.0
0
1            column=sales:product, timestamp=1514025990770, value=Chair
s
2            column=customer:city, timestamp=1514025857991, value=Atlan
ta, GA
2            column=customer:name, timestamp=1514025747520, value=Jane
Brown
2            column=sales:amount, timestamp=1514026165954, value=$200.0
0
2            column=sales:product, timestamp=1514026004179, value=Lamps
3            column=customer:city, timestamp=1514025884434, value=Pitts
burgh, PA
3            column=customer:name, timestamp=1514025761130, value=Bill
Green
3            column=sales:amount, timestamp=1514026176250, value=$500.0
0
3            column=sales:product, timestamp=1514026014581, value=Desk
4            column=customer:city, timestamp=1514025913081, value=St. L
ouis, MO
4            column=customer:name, timestamp=1514025778831, value=Jack
Black
4            column=sales:amount, timestamp=1514026187676, value=$1,600
.00
```

Ques3 Write command to check whether a table exists or not.

```
student@student-OptiPlex-3020: ~
hbase(main):001:0> list
TABLE
cus_data
1 row(s) in 0.1970 seconds

=> ["cus_data"]
hbase(main):002:0> exists 'cus_data'
Table cus_data does exist
0 row(s) in 0.0770 seconds

hbase(main):003:0> █
```


Ques4 Change the value of \$500.00 to \$1500.00 in amount column.

```
student@student-OptiPlex-3020: ~
hbase(main):004:0> put 'cus_data','3','sales:amount','$1,500.00'
0 row(s) in 0.0510 seconds

hbase(main):005:0> scan 'cus_data'
ROW          COLUMN+CELL
1            column=customer:city, timestamp=1514025837234, value=Los Angeles, CA
1            column=customer:name, timestamp=1514025714324, value=John White
1            column=sales:amount, timestamp=1514026150788, value=$400.00
1            column=sales:product, timestamp=1514025990770, value=Chairs
2            column=customer:city, timestamp=1514025857991, value=Atlanta, GA
2            column=customer:name, timestamp=1514025747520, value=Jane Brown
2            column=sales:amount, timestamp=1514026165954, value=$200.00
2            column=sales:product, timestamp=1514026004179, value=Lamps
3            column=customer:city, timestamp=1514025884434, value=Pittsburgh, PA
3            column=customer:name, timestamp=1514025761130, value=Bill Green
3            column=sales:amount, timestamp=1514091430462, value=$1,500.00
3            column=sales:product, timestamp=1514026014581, value=Desk
```

Ques5 List the values present in row 103 only.

```
student@student-OptiPlex-3020: ~
hbase(main):006:0> get 'cus_data','3'
COLUMN      CELL
customer:city timestamp=1514025884434, value=Pittsburgh, PA
customer:name timestamp=1514025761130, value=Bill Green
sales:amount  timestamp=1514091430462, value=$1,500.00
sales:product timestamp=1514026014581, value=Desk
4 row(s) in 0.0300 seconds

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

Ques6 Delete the city value of row id 104.

```
student@student-OptiPlex-3020: ~
hbase(main):010:0> get 'cus_data','4'
COLUMN                                CELL
customer:city                         timestamp=1514025913081, value=St. Louis,
customer:name                         timestamp=1514025778831, value=Jack Black
sales:amount                         timestamp=1514026187676, value=$1,600.00
sales:product                         timestamp=1514026128489, value=Bed
4 row(s) in 0.0100 seconds

hbase(main):011:0> delete 'cus_data','4','customer:city',1514025913081
0 row(s) in 0.0300 seconds

hbase(main):012:0> get 'cus_data','4'
COLUMN                                CELL
customer:name                         timestamp=1514025778831, value=Jack Black
sales:amount                         timestamp=1514026187676, value=$1,600.00
sales:product                         timestamp=1514026128489, value=Bed
3 row(s) in 0.0060 seconds

hbase(main):013:0> 
```

Ques7 Drop table customer_data.

```
student@student-OptiPlex-3020: ~
hbase(main):013:0> disable 'cus_data'
0 row(s) in 2.3700 seconds

hbase(main):014:0> drop 'cus_data'
0 row(s) in 2.2820 seconds

hbase(main):015:0> exists 'cus_data'
Table cus_data does not exist
0 row(s) in 0.0150 seconds

hbase(main):016:0> 
```


Row Key	Customer		Sales	
Customer Id	Name	City	Product	Amount
101	John White	Los Angeles, CA	Chairs	\$400.00
102	Jane Brown	Atlanta, GA	Lamps	\$200.00
103	Bill Green	Pittsburgh, PA	Desk	\$500.00
104	Jack Black	St. Louis, MO	Bed	\$1600.00

Ques1. Insert the above data in hbase table using commands.

```

student@student-OptiPlex-3020: ~
hbase(main):005:0> create 'cus_data','customer','sales'
0 row(s) in 2.3770 seconds

=> Hbase::Table - cus_data
hbase(main):006:0> list
TABLE
cus_data
1 row(s) in 0.0060 seconds

=> ["cus_data"]
hbase(main):007:0>

```

```

student@student-OptiPlex-3020: ~
hbase(main):008:0> put 'cus_data','102','customer:name','Jane Brown'
0 row(s) in 0.0100 seconds

hbase(main):009:0> put 'cus_data','103','customer:name','Bill Green'
0 row(s) in 0.0090 seconds

hbase(main):010:0> put 'cus_data','104','customer:name','Jack Black'
0 row(s) in 0.0050 put 'cus_data','101','customer:city','Los Angeles, CA'
0 row(s) in 0.0090 seconds

hbase(main):012:0> put 'cus_data','102','customer:city','Atlanta, GA'
0 row(s) in 0.0100 seconds

hbase(main):013:0> put 'cus_data','103','customer:city','Pittsburgh, PA'
0 row(s) in 0.0050 seconds

hbase(main):014:0> put 'cus_data','104','customer:city','St. Louis, MO'
0 row(s) in 0.0070 seconds

hbase(main):015:0> put 'cus_data','101','sales:product','Chairs'
0 row(s) in 0.0100 seconds

hbase(main):016:0> put 'cus_data','102','sales:product','Lamps'
0 row(s) in 0.0070 seconds

hbase(main):017:0> put 'cus_data','103','sales:product','Desk'
0 row(s) in 0.0070 seconds

```

```

student@student-OptiPlex-3020: ~
101      column=customer:name, timestamp=1514092996263, value=John
        White
101      column=sales:amount, timestamp=1514093660779, value=$400.
        00
101      column=sales:product, timestamp=1514093294439, value=Chai
        rs
102      column=customer:city, timestamp=1514093225606, value=Atla
        nta, GA
102      column=customer:name, timestamp=1514093012208, value=Jane
        Brown
102      column=sales:amount, timestamp=1514093668853, value=$200.
        00
102      column=sales:product, timestamp=1514093592089, value=Lamp
        s
103      column=customer:city, timestamp=1514093248348, value=Pitt
        sburgh, PA
103      column=customer:name, timestamp=1514093028209, value=Bill
        Green
103      column=sales:amount, timestamp=1514093678446, value=$500.
        00
103      column=sales:product, timestamp=1514093617320, value=Desk
104      column=customer:city, timestamp=1514093267077, value=St.
        Louis, MO
104      column=customer:name, timestamp=1514093044803, value=Jack
        Black
104      column=sales:amount, timestamp=1514093695664, value=$1600
        .00
104      column=sales:product, timestamp=1514093641922, value=Bed

```


Ques2. Write the command to check the no. of rows in a table.

```
hbase(main):036:0> count 'customer_db'
4 row(s) in 0.0460 seconds

=> 4
hbase(main):037:0> █
```

Ques3. Write command to check all the tables in hbase.

```
hbase(main):037:0> list 'customer_db'
TABLE
customer_db
1 row(s) in 0.0820 seconds

=> ["customer_db"]
hbase(main):038:0> list
TABLE
customer_db
1 row(s) in 0.0010 seconds

=> ["customer_db"]
hbase(main):039:0> █
```

Ques4 Change the value of amount in customer_id 104 to \$1800.00.

```
hbase(main):039:0> put 'customer_db','4','sales:Ammount','$1800.00'
0 row(s) in 0.0170 seconds

hbase(main):040:0> get 'customer_db','4'
COLUMN                                CELL
customer:City                         timestamp=1514091563711, value=St. Louis,MO
customer:Name                         timestamp=1514091597386, value=JAck Black
sales:Ammount                        timestamp=1514091890438, value=$1800.00
sales:Product                        timestamp=1514091462963, value=Bed
4 row(s) in 0.0100 seconds

hbase(main):041:0> █
```


Ques5. Drop the table from the hbase.

```
hbase(main):041:0> disable 'customer_db'  
0 row(s) in 2.3200 seconds  
  
hbase(main):042:0> drop 'customer_db'  
0 row(s) in 1.2740 seconds  
  
hbase(main):043:0> exists 'customer_db'  
Table customer_db does not exist  
0 row(s) in 0.0070 seconds
```