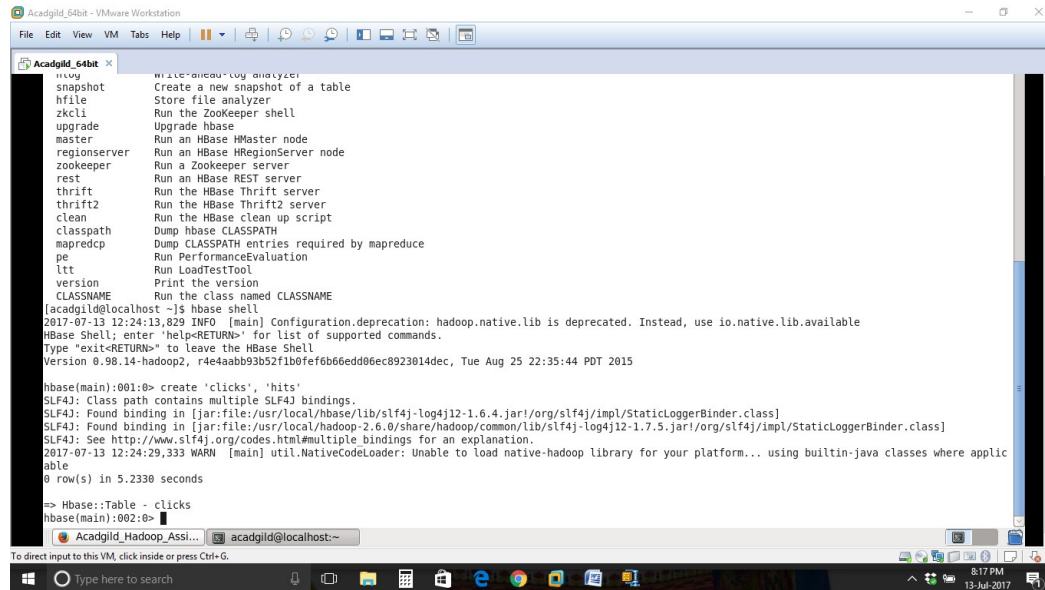


Assignment 17.2

Problem Statement :1

Create an HBase table named 'clicks' with a column family 'hits' such that it should be able to store last 5 values of qualifiers inside 'hits' column family.

1.create 'clicks','hits'

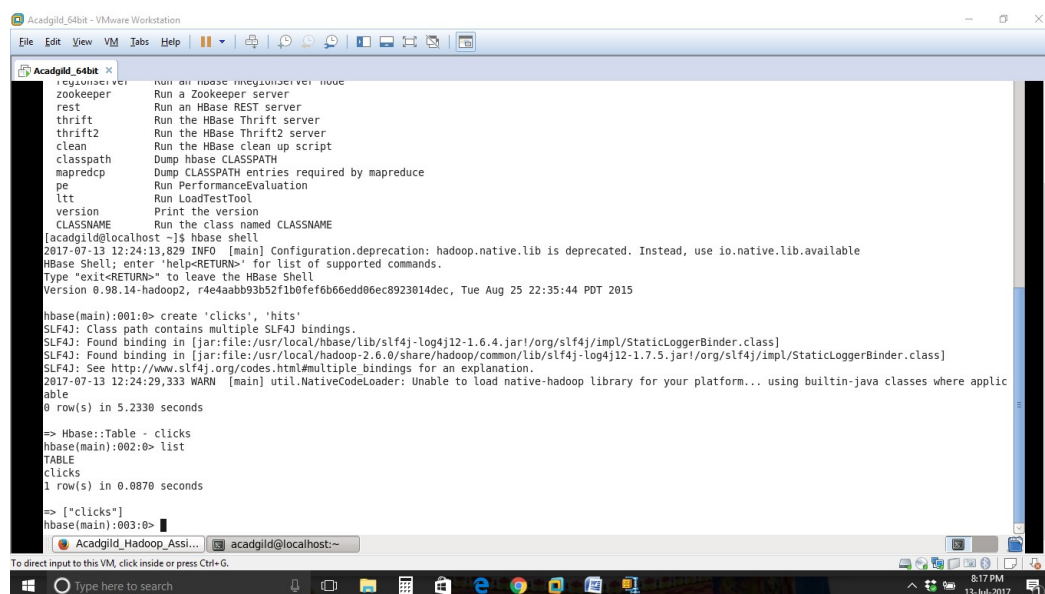


```
Acadgild_64bit
File Edit View VM Tabs Help
Acadgild_64bit
hbase
snapshot Create a new snapshot of a table
hfile Store file analyzer
zkcli Run the ZooKeeper shell
upgrade Upgrade hbase
master Run an HBase HMaster node
regionserver Run an HBase HRegionServer node
zookeeper Run a Zookeeper server
rest Run an HBase REST server
thrift Run the HBase Thrift server
thrift2 Run the HBase Thrift2 server
clean Run the HBase clean up script
classpath Dump hbase CLASSPATH
mapredcp Dump CLASSPATH entries required by mapreduce
pe Run PerformanceEvaluation
ltt Run LoadTestTool
version Print the version
CLASSNAME Run the class named CLASSNAME
[acadgild@localhost ~]$ hbase shell
2017-07-13 12:24:13,829 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 0.98.14-hadoop2, r4e4aabb93b52f1b0fef6b66edd06ec8923014dec, Tue Aug 25 22:35:44 PDT 2015

hbase(main):001:0> create 'clicks', 'hits'
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/usr/local/hbase/lib/slf4j-log4j12-1.6.4.jar/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/slf4j-log4j12-1.7.5.jar/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
2017-07-13 12:24:29,333 WARN [main] util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applic
0 row(s) in 5.2330 seconds

=> Hbase::Table - clicks
hbase(main):002:0>
```

2.List



```
Acadgild_64bit
File Edit View VM Tabs Help
Acadgild_64bit
hbase
snapshot Create a new snapshot of a table
hfile Store file analyzer
zkcli Run the ZooKeeper shell
upgrade Upgrade hbase
master Run an HBase HMaster node
regionserver Run an HBase HRegionServer node
zookeeper Run a Zookeeper server
rest Run an HBase REST server
thrift Run the HBase Thrift server
thrift2 Run the HBase Thrift2 server
clean Run the HBase clean up script
classpath Dump hbase CLASSPATH
mapredcp Dump CLASSPATH entries required by mapreduce
pe Run PerformanceEvaluation
ltt Run LoadTestTool
version Print the version
CLASSNAME Run the class named CLASSNAME
[acadgild@localhost ~]$ hbase shell
2017-07-13 12:24:13,829 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 0.98.14-hadoop2, r4e4aabb93b52f1b0fef6b66edd06ec8923014dec, Tue Aug 25 22:35:44 PDT 2015

hbase(main):001:0> create 'clicks', 'hits'
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/usr/local/hbase/lib/slf4j-log4j12-1.6.4.jar/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/slf4j-log4j12-1.7.5.jar/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
2017-07-13 12:24:29,333 WARN [main] util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applic
0 row(s) in 5.2330 seconds

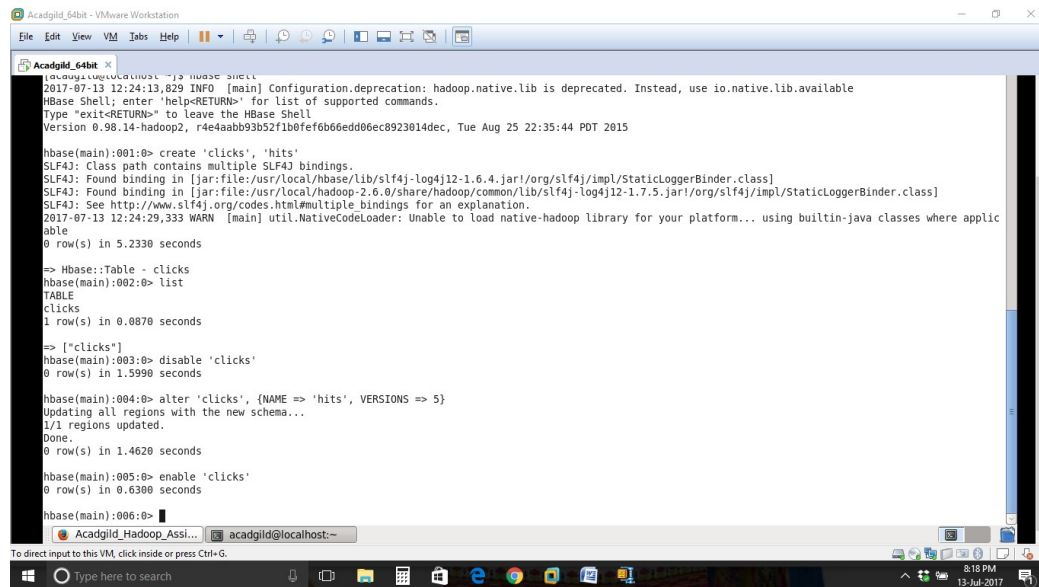
=> Hbase::Table - clicks
hbase(main):002:0> list
TABLE
clicks
1 row(s) in 0.0870 seconds

=> ["clicks"]
hbase(main):003:0>
```

Disable 'clicks'

Alter 'clicks', {NAME=>'hits',VERSIONS=>5}

Enable 'clicks'



```
Acadgild_64bit - VMware Workstation
File Edit View VM Tabs Help
Acadgild_64bit x
C:\Users\Acadgild>cmd /c cd /d C:\Users\Acadgild\Documents\HBase\bin & java -jar hbase-shell
2017-07-13 12:24:13,829 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 0.98.14-hadoop2, r4e4aabb93b52f1b0fef6b66edd06ec8923014dec, Tue Aug 25 22:35:44 PDT 2015

hbase(main):001:0> create 'clicks', 'hits'
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/usr/local/hbase/lib/slf4j-log4j12-1.6.4.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/slf4j-log4j12-1.7.5.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
2017-07-13 12:24:29,333 WARN [main] util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
0 row(s) in 5.2330 seconds

=> Hbase::Table - clicks
hbase(main):002:0> list
TABLE
clicks
1 row(s) in 0.0070 seconds

=> ["clicks"]
hbase(main):003:0> disable 'clicks'
0 row(s) in 1.5990 seconds

hbase(main):004:0> alter 'clicks', {NAME => 'hits', VERSIONS => 5}
Updating all regions with the new schema...
1/1 regions updated.
Done.
0 row(s) in 1.4620 seconds

hbase(main):005:0> enable 'clicks'
0 row(s) in 0.6300 seconds

hbase(main):006:0>
```

Acadgild_Hadoop_Assi... acadgild@localhost:~

To direct input to this VM, click inside or press Ctrl+G.

Type here to search

8:18 PM
13-Jul-2017

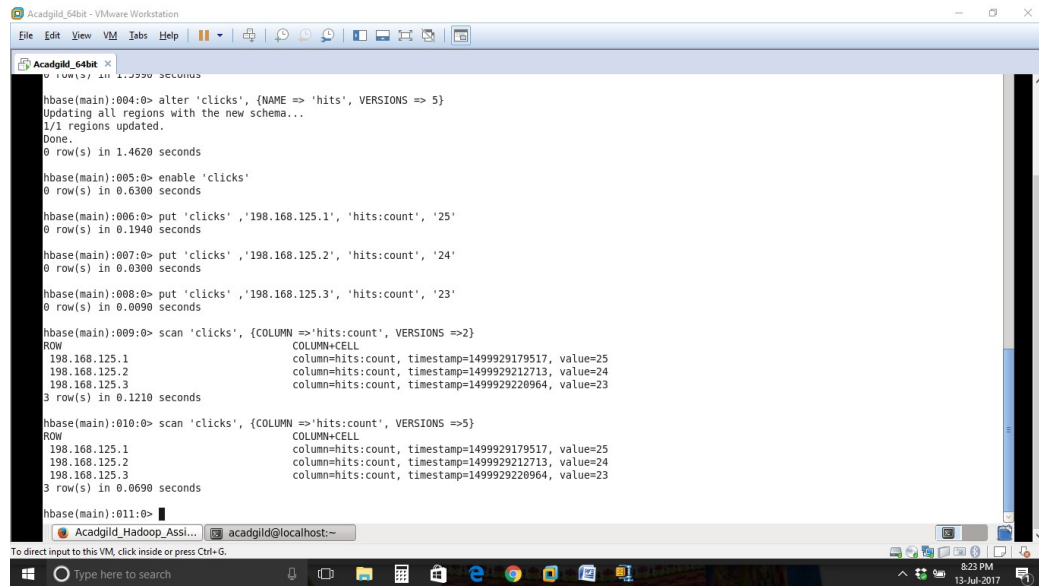
Problem Statement 2:

Add few records in the table and update some of them. Use IP Address as row-key. Scan the table to view if all the previous versions are getting displayed.

Data inserted into table clicks using put command

Put 'clicks','192.168.125.1','hits:count',25

Scan 'clicks',{column=>'hits:count',VERSIONS=>2}



```
hbase(main):004:0> alter 'clicks', {NAME => 'hits', VERSIONS => 5}
Updating all regions with the new schema...
1/1 regions updated.
Done.
0 row(s) in 1.4620 seconds

hbase(main):005:0> enable 'clicks'
0 row(s) in 0.6300 seconds

hbase(main):006:0> put 'clicks', '198.168.125.1', 'hits:count', '25'
0 row(s) in 0.1940 seconds

hbase(main):007:0> put 'clicks', '198.168.125.2', 'hits:count', '24'
0 row(s) in 0.0300 seconds

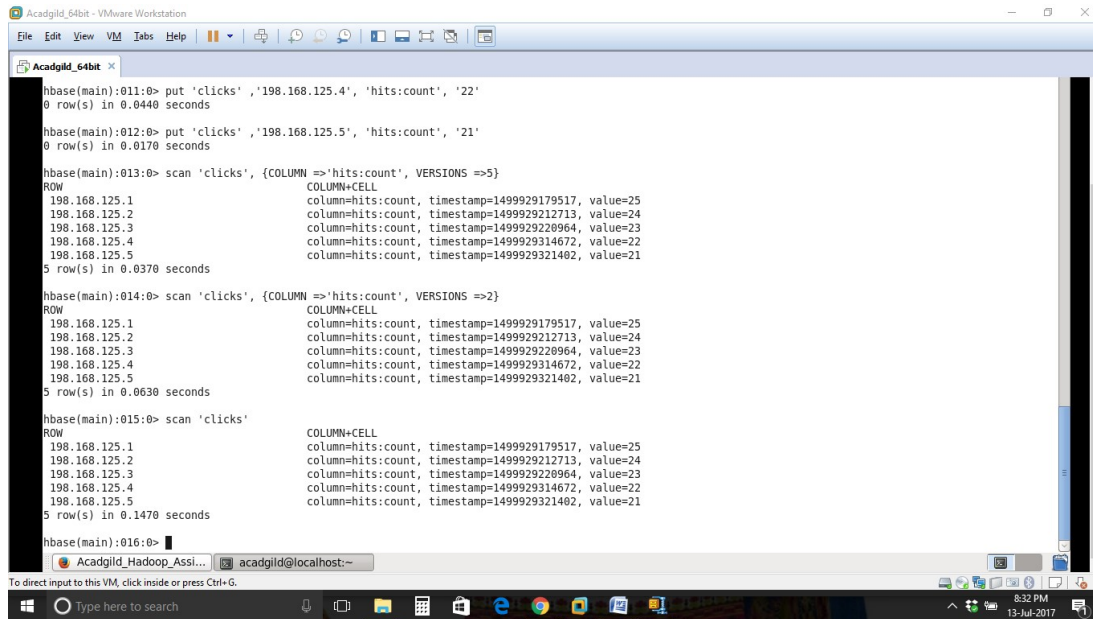
hbase(main):008:0> put 'clicks', '198.168.125.3', 'hits:count', '23'
0 row(s) in 0.0090 seconds

hbase(main):009:0> scan 'clicks', {COLUMN => 'hits:count', VERSIONS => 2}
ROW
198.168.125.1      COLUMN=hits:count, timestamp=1499929179517, value=25
198.168.125.2      COLUMN=hits:count, timestamp=1499929212713, value=24
198.168.125.3      COLUMN=hits:count, timestamp=1499929220964, value=23
3 row(s) in 0.1210 seconds

hbase(main):010:0> scan 'clicks', {COLUMN => 'hits:count', VERSIONS => 5}
ROW
198.168.125.1      COLUMN=hits:count, timestamp=1499929179517, value=25
198.168.125.2      COLUMN=hits:count, timestamp=1499929212713, value=24
198.168.125.3      COLUMN=hits:count, timestamp=1499929220964, value=23
3 row(s) in 0.0690 seconds

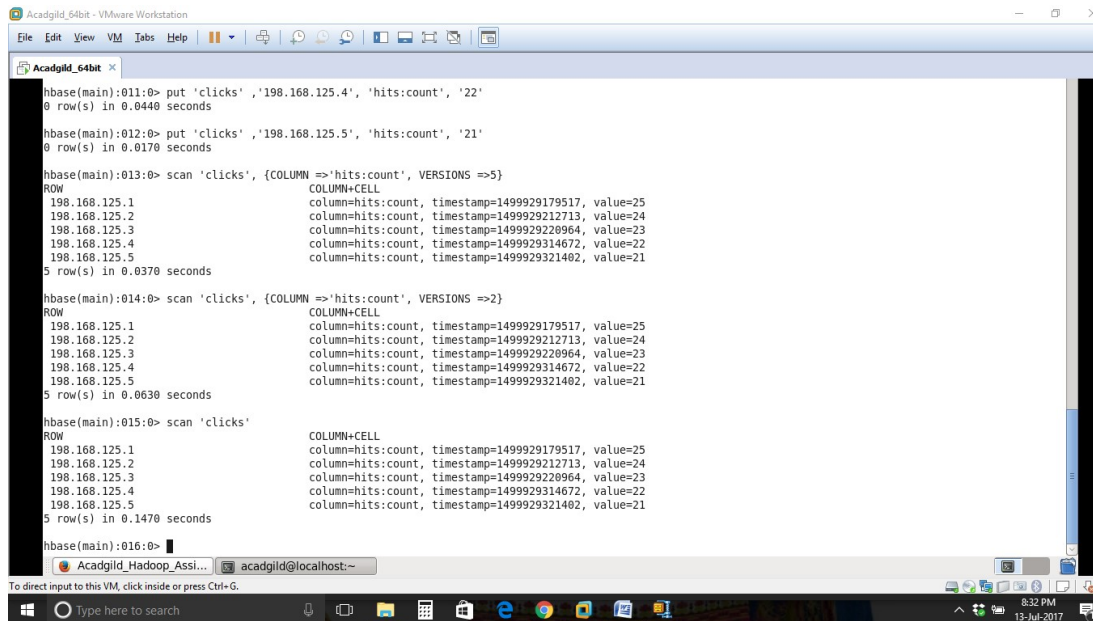
hbase(main):011:0>
```

Scan 'clicks', {'column=>'hits:count',VERSIONS=>5}



```
Acadgild_64bit - VMware Workstation
File Edit View VM Tabs Help
Acadgild_64bit x
hbase(main):011:0> put 'clicks' , '198.168.125.4', 'hits:count', '22'
0 row(s) in 0.0440 seconds
hbase(main):012:0> put 'clicks' , '198.168.125.5', 'hits:count', '21'
0 row(s) in 0.0170 seconds
hbase(main):013:0> scan 'clicks', {COLUMN =>'hits:count', VERSIONS =>5}
ROW COLUMN+CELL
198.168.125.1 column=hits:count, timestamp=1499929179517, value=25
198.168.125.2 column=hits:count, timestamp=1499929212713, value=24
198.168.125.3 column=hits:count, timestamp=1499929220964, value=23
198.168.125.4 column=hits:count, timestamp=1499929314672, value=22
198.168.125.5 column=hits:count, timestamp=1499929321402, value=21
5 row(s) in 0.0370 seconds
hbase(main):014:0> scan 'clicks', {COLUMN =>'hits:count', VERSIONS =>2}
ROW COLUMN+CELL
198.168.125.1 column=hits:count, timestamp=1499929179517, value=25
198.168.125.2 column=hits:count, timestamp=1499929212713, value=24
198.168.125.3 column=hits:count, timestamp=1499929220964, value=23
198.168.125.4 column=hits:count, timestamp=1499929314672, value=22
198.168.125.5 column=hits:count, timestamp=1499929321402, value=21
5 row(s) in 0.0630 seconds
hbase(main):015:0> scan 'clicks'
ROW COLUMN+CELL
198.168.125.1 column=hits:count, timestamp=1499929179517, value=25
198.168.125.2 column=hits:count, timestamp=1499929212713, value=24
198.168.125.3 column=hits:count, timestamp=1499929220964, value=23
198.168.125.4 column=hits:count, timestamp=1499929314672, value=22
198.168.125.5 column=hits:count, timestamp=1499929321402, value=21
5 row(s) in 0.1470 seconds
hbase(main):016:0>
Acadgild_Hadoop_Assi... acadgild@localhost:~
To direct input to this VM, click inside or press Ctrl+G.
Type here to search 8:32 PM 13-Jul-2017
```

Scan 'clicks'



```
Acadgild_64bit - VMware Workstation
File Edit View VM Tabs Help
Acadgild_64bit x
hbase(main):011:0> put 'clicks' , '198.168.125.4', 'hits:count', '22'
0 row(s) in 0.0440 seconds
hbase(main):012:0> put 'clicks' , '198.168.125.5', 'hits:count', '21'
0 row(s) in 0.0170 seconds
hbase(main):013:0> scan 'clicks', {COLUMN =>'hits:count', VERSIONS =>5}
ROW COLUMN+CELL
198.168.125.1 column=hits:count, timestamp=1499929179517, value=25
198.168.125.2 column=hits:count, timestamp=1499929212713, value=24
198.168.125.3 column=hits:count, timestamp=1499929220964, value=23
198.168.125.4 column=hits:count, timestamp=1499929314672, value=22
198.168.125.5 column=hits:count, timestamp=1499929321402, value=21
5 row(s) in 0.0370 seconds
hbase(main):014:0> scan 'clicks', {COLUMN =>'hits:count', VERSIONS =>2}
ROW COLUMN+CELL
198.168.125.1 column=hits:count, timestamp=1499929179517, value=25
198.168.125.2 column=hits:count, timestamp=1499929212713, value=24
198.168.125.3 column=hits:count, timestamp=1499929220964, value=23
198.168.125.4 column=hits:count, timestamp=1499929314672, value=22
198.168.125.5 column=hits:count, timestamp=1499929321402, value=21
5 row(s) in 0.0630 seconds
hbase(main):015:0> scan 'clicks'
ROW COLUMN+CELL
198.168.125.1 column=hits:count, timestamp=1499929179517, value=25
198.168.125.2 column=hits:count, timestamp=1499929212713, value=24
198.168.125.3 column=hits:count, timestamp=1499929220964, value=23
198.168.125.4 column=hits:count, timestamp=1499929314672, value=22
198.168.125.5 column=hits:count, timestamp=1499929321402, value=21
5 row(s) in 0.1470 seconds
hbase(main):016:0>
Acadgild_Hadoop_Assi... acadgild@localhost:~
To direct input to this VM, click inside or press Ctrl+G.
Type here to search 8:32 PM 13-Jul-2017
```

```
Acadgild_64bit - VMware Workstation
File Edit View VM Tabs Help
Acadgild_64bit x
hbase(main):007:0> put 'clicks', '198.168.125.2', 'hits:count', '24'
0 row(s) in 0.0300 seconds
hbase(main):008:0> put 'clicks', '198.168.125.3', 'hits:count', '23'
0 row(s) in 0.0090 seconds
hbase(main):009:0> scan 'clicks', {COLUMN =>'hits:count', VERSIONS =>2}
ROW
198.168.125.1 column=hits:count, timestamp=1499929179517, value=25
198.168.125.2 column=hits:count, timestamp=1499929212713, value=24
198.168.125.3 column=hits:count, timestamp=1499929220964, value=23
3 row(s) in 0.1210 seconds
hbase(main):010:0> scan 'clicks', {COLUMN =>'hits:count', VERSIONS =>5}
ROW
198.168.125.1 column=hits:count, timestamp=1499929179517, value=25
198.168.125.2 column=hits:count, timestamp=1499929212713, value=24
198.168.125.3 column=hits:count, timestamp=1499929220964, value=23
3 row(s) in 0.0690 seconds
hbase(main):011:0> put 'clicks', '198.168.125.4', 'hits:count', '22'
0 row(s) in 0.0440 seconds
hbase(main):012:0> put 'clicks', '198.168.125.5', 'hits:count', '21'
0 row(s) in 0.0170 seconds
hbase(main):013:0> scan 'clicks', {COLUMN =>'hits:count', VERSIONS =>5}
ROW
198.168.125.1 column=hits:count, timestamp=1499929179517, value=25
198.168.125.2 column=hits:count, timestamp=1499929212713, value=24
198.168.125.3 column=hits:count, timestamp=1499929220964, value=23
198.168.125.4 column=hits:count, timestamp=1499929314672, value=22
198.168.125.5 column=hits:count, timestamp=1499929321402, value=21
5 row(s) in 0.0370 seconds
Click to switch to "Workspace 2"
[Acadgild_Hadoop_Ass... acadgild@localhost:~
```