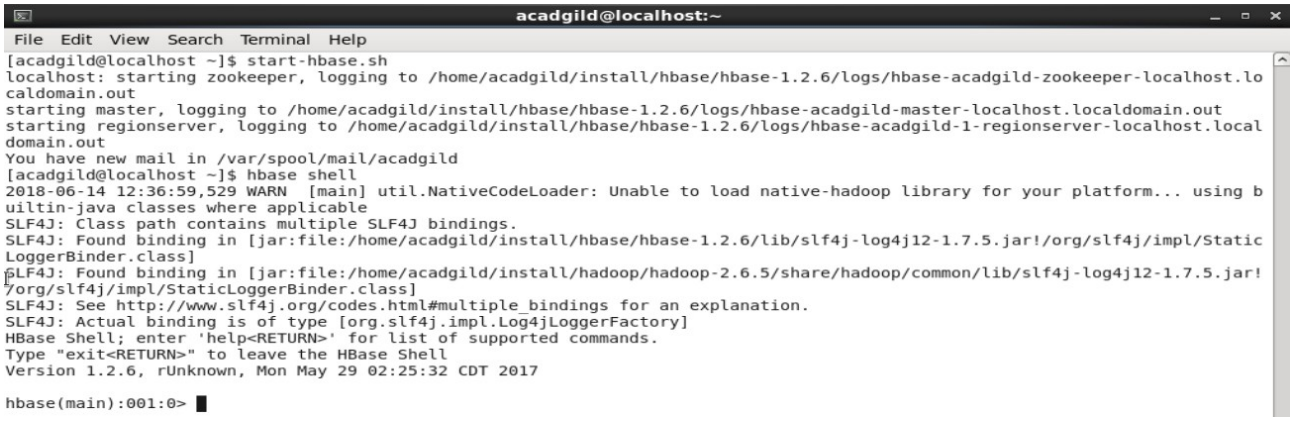
Bigdata Assignment 3.8

Started the Hbase shell :
start-hbase.sh
hbase shell

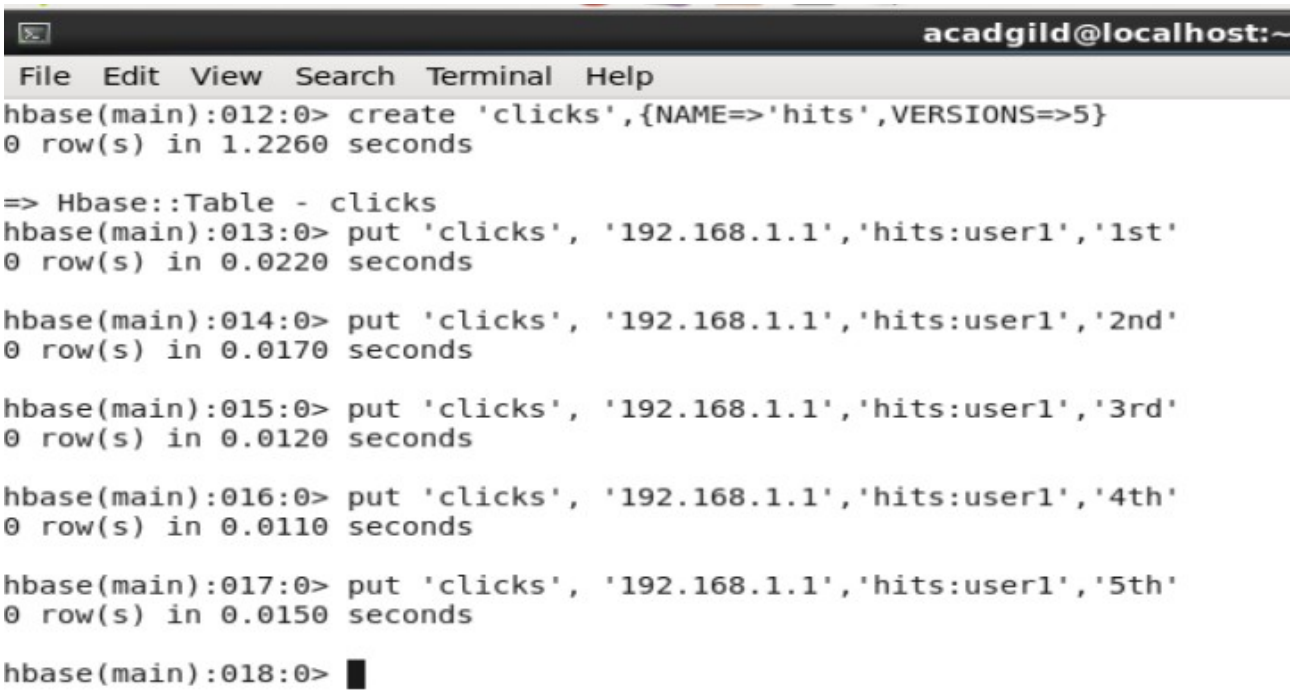


Problem 1:
Create an HBase table named 'clicks' with a column family 'hits' such that it should be able to store last 5 values of qualifiers inside 'hits' column family.

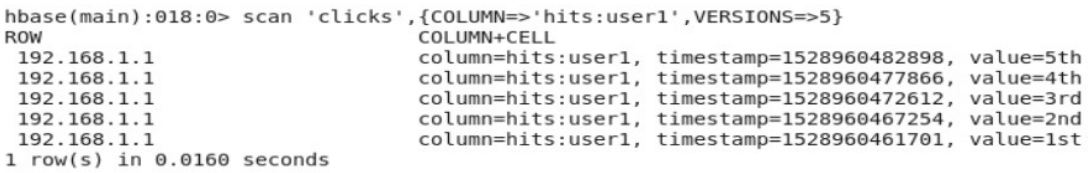
Solution -

- Table 'clicks' wa screated and values were inserted

create 'clicks' , {NAME='hits',VERSIONS=>5}
put 'clicks' , '192.168.1.1' , 'hits:user1', '1st'
put 'clicks' , '192.168.1.1' , 'hits:user1', '2nd'
put 'clicks' , '192.168.1.1' , 'hits:user1', '3rd'
put 'clicks' , '192.168.1.1' , 'hits:user1', '4th'
put 'clicks' , '192.168.1.1' , 'hits:user1', '5th'

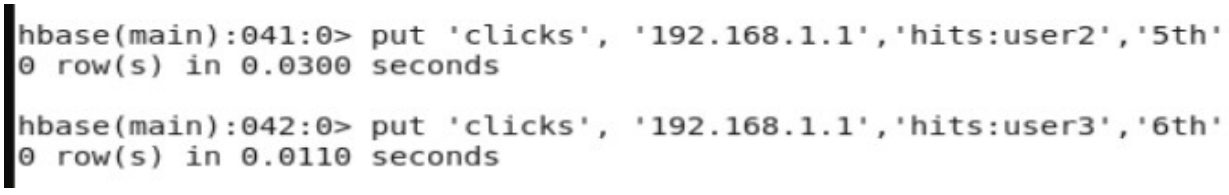


- To display the values
  scan 'clicks' , {COLUMN=>'hits:user1',VERSIONS=>5}



In the above screenshot it is evident that we got the previous 5 values for the particular column

- We added different columns



- To display the values

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

```
hbase(main):044:0> scan 'clicks',{NAME=>'hits',VERSIONS=>5}
ROW                           COLUMN+CELL
 192.168.1.1                  column=hits:user1, timestamp=1528963839109, value=5th
 192.168.1.1                  column=hits:user1, timestamp=1528963827293, value=4th
 192.168.1.1                  column=hits:user1, timestamp=1528963816399, value=3rd
 192.168.1.1                  column=hits:user1, timestamp=1528963806540, value=2nd
 192.168.1.1                  column=hits:user1, timestamp=1528963792740, value=1st
 192.168.1.1                  column=hits:user2, timestamp=1528964197536, value=5th
 192.168.1.1                  column=hits:user3, timestamp=1528964210048, value=6th
1 row(s) in 0.0170 seconds
```

In the above screenshot , we observe that for each particular hits column we can retrieve 5 previous values

Problem 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.

Solution -

- We updated some records

put 'clicks' , '192.168.1.1' , 'hits:user2', '7th'
put 'clicks' , '192.168.1.1' , 'hits:user3', '4th'

```
hbase(main):045:0> put 'clicks', '192.168.1.1','hits:user2','7th'
0 row(s) in 0.0230 seconds

hbase(main):046:0> put 'clicks', '192.168.1.1','hits:user3','4th'
0 row(s) in 0.0110 seconds
```

- The content of the table is displayed containing previous 5 versions. **scan 'clicks',{NAME=>'hits',VERSIONS=>5}**

```
hbase(main):048:0> scan 'clicks',{NAME=>'hits',VERSIONS=>5}
ROW                           COLUMN+CELL
 192.168.1.1                  column=hits:user1, timestamp=1528963839109, value=5th
 192.168.1.1                  column=hits:user1, timestamp=1528963827293, value=4th
 192.168.1.1                  column=hits:user1, timestamp=1528963816399, value=3rd
 192.168.1.1                  column=hits:user1, timestamp=1528963806540, value=2nd
 192.168.1.1                  column=hits:user1, timestamp=1528963792740, value=1st
 192.168.1.1                  column=hits:user2, timestamp=1528964377137, value=7th
 192.168.1.1                  column=hits:user2, timestamp=1528964197536, value=5th
 192.168.1.1                  column=hits:user3, timestamp=1528964384114, value=4th
 192.168.1.1                  column=hits:user3, timestamp=1528964210048, value=6th
1 row(s) in 0.0740 seconds
```

In the avove screenshot it is evident taht as we have set versions to 5 , after updating some records , we are gettings its previous value and the current values.