

## Assignment 4

- hive commands

```
hduser@ubuntu:~$ start-all.sh
```

```
hduser@ubuntu:~$ hive
```

- Creation of table:

```
hive > create database pooja;
```

```
OK
```

```
Time taken: 1.955 seconds
```

```
hive (default)> use pooja;
```

```
OK
```

```
Time taken: 0.048 seconds
```

```
hive > create table pooja(firstname string,lastname string,employeeid int);
```

```
OK
```

```
Time taken: 0.873 seconds
```

```
hive> show tables;
```

```
OK
```

```
our_first_table
```

```
Time taken: 0.114 seconds, Fetched: 1 row(s)
```

- Set db properties use alter command

```
hive> alter database pooja set dbproperties
```

```
> ('creator'=Pooja Kanwate',
```

```
> 'created_for'=Learning Hive DDL');
```

```
OK
```

```
Time taken: 0.315 seconds
```

```
hive> describe database extended pooja;
```

```
OK
```

```
pooja  hdfs://localhost:9000/user/hive/warehouse/minal.db hduser USER {creator=Pooja  
Kanwate, created_for=learning hive DDL}
```

```
Time taken: 0.024 seconds, Fetched: 1 row(s)
```

- Dropping of table:

```
hive> drop database pooja cascade;
```

```
OK
```

```
Time taken: 2.884 seconds
```

- hbase Commands:

```
hduser@ubuntu:/usr/local/hbase$ cd bin
```

```
hduser@ubuntu:/usr/local/hbase/bin$ ls
```

```
draining_servers.rb  hbase-daemons.sh      rolling-restart.sh
```

```
get-active-master.rb hbase-jruby            shutdown_regionserver.rb
```

```
graceful_stop.sh     hirb.rb                start-hbase.cmd
```

```
hbase                local-master-backup.sh start-hbase.sh
```

```
hbase-cleanup.sh     local-regionserver.sh  stop-hbase.cmd
```

```
hbase.cmd            master-backup.sh       stop-hbase.sh
```

```
hbase-common.sh      region_mover.rb        test
```

```
hbase-config.cmd     regionserver.sh        thread-pool.rb
```

```
hbase-config.sh      region_status.rb       zookeepers.sh
```

```
hbase-daemon.sh      replication
```

```
hduser@ubuntu:/usr/local/hbase/bin$ cd
```

```

hduser@ubuntu:~$ jps
4321 RunJar
4020 NodeManager
6260 Jps
3894 ResourceManager
3496 DataNode
3374 NameNode
3663 SecondaryNameNode
hduser@ubuntu:~$ cd /usr/local/hbase/bin
hduser@ubuntu:/usr/local/hbase/bin$ ./start-hbase.sh
hduser@localhost's password:
localhost: running zookeeper, logging to /usr/local/hbase/bin/../logs/hbase-hduser-zookeeper-ubuntu.out
running master, logging to /usr/local/hbase/bin/../logs/hbase-hduser-master-ubuntu.out
: running regionserver, logging to /usr/local/hbase/bin/../logs/hbase-hduser-regionserver-ubuntu.out
hduser@ubuntu:/usr/local/hbase/bin$ jps
6576 HMaster
4321 RunJar
7028 Jps
4020 NodeManager
3894 ResourceManager
3496 DataNode
6522 HQuorumPeer
3374 NameNode
6654 HRegionServer
3663 SecondaryNameNode
hduser@ubuntu:/usr/local/hbase/bin$ ./hbase shell
2020-01-22 07:13:59,224 WARN [main] util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/usr/local/hbase/lib/slf4j-log4j12-1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/usr/local/hadoop/share/hadoop/common/lib/slf4j-log4j12-1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.slf4j.impl.Log4jLoggerFactory]
HBase Shell
Use "help" to get list of supported commands.
Use "exit" to quit this interactive shell.
Version 1.4.12, r6ae4a77408ad35d6a7a4e5cebfd401fc4b72b5ec, Sun Nov 24 13:25:41 CST 2019

```

- creation of table in hbase:

```

hbase(main):002:0> create 'flight','finfo','fsch'
0 row(s) in 4.8520 seconds

```

```

=> Hbase::Table - flight
hbase(main):003:0> list

```

TABLE

CustomerInformation

flight

2 row(s) in 0.2300 seconds

- Insertion Of data in table:

```
=> ["CustomerInformation", "flight"]
```

```
hbase(main):004:0> put 'flight',1,'info:source','pune'
```

0 row(s) in 0.6580 seconds

```
hbase(main):005:0> put 'flight',2,'info:source','mumbai1'
```

0 row(s) in 0.0360 seconds

```
hbase(main):006:0> put 'flight',1,'sch:at','11.11a.m.'
```

0 row(s) in 0.0460 seconds

```
hbase(main):007:0> put 'flight',1,'sch:dt','12.50p.m.'
```

0 row(s) in 0.0720 seconds

```
hbase(main):008:0> put 'flight',1,'sch:delay','4'
```

0 row(s) in 0.0530 seconds

```
hbase(main):009:0> put 'flight',2,'info:source','pune'
```

0 row(s) in 0.0250 seconds

```
hbase(main):010:0> put 'flight',2,'info:dest','kolhapur'
```

0 row(s) in 0.0320 seconds

```
hbase(main):011:0> put 'flight',2,'sch:at','11.10a.m.'
```

0 row(s) in 0.0260 seconds

```
hbase(main):012:0> put 'flight',2,'sch:dt','12.10p.m.'
```

0 row(s) in 0.0610 seconds

```
hbase(main):013:0> put 'flight',2,'sch:delay','4'
```

0 row(s) in 0.0310 seconds

```
hbase(main):014:0> put 'flight',3,'info:source','pune'
```

0 row(s) in 0.0290 seconds

```
hbase(main):015:0> put 'flight',3,'info:dest','jalgaon'
```

0 row(s) in 0.0340 seconds

```
hbase(main):016:0> put 'flight',3,'sch:at','10.10a.m.'
```

0 row(s) in 0.0320 seconds

```
hbase(main):017:0> put 'flight',3,'sch:dt','10.10p.m.'
```

0 row(s) in 0.0270 seconds

```
hbase(main):018:0> put 'flight',3,'sch:delay','10'
```

0 row(s) in 0.0530 seconds

hbase(main):019:0> put 'flight',4,'finfo:source','pune'  
0 row(s) in 0.0580 seconds

hbase(main):020:0> put 'flight',4,'finfo:dest','sangli'  
0 row(s) in 0.0330 seconds

hbase(main):021:0> put 'flight',4,'fsch:at','1.10a.m.'  
0 row(s) in 0.0280 seconds

hbase(main):022:0> put 'flight',4,'fsch:dt','3.10a.m.'  
0 row(s) in 0.0360 seconds

hbase(main):023:0> put 'flight',4,'fsch:delay','1'  
0 row(s) in 0.0340 seconds

hbase(main):024:0> put 'flight',5,'finfo:source','pune'  
0 row(s) in 0.1080 seconds

hbase(main):025:0> put 'flight',5,'finfo:dest','aurangabad'  
0 row(s) in 0.0310 seconds

hbase(main):026:0> put 'flight',5,'fsch:at','2.10a.m.'  
0 row(s) in 0.0350 seconds

hbase(main):027:0> put 'flight',5,'fsch:dt','3.01a.m.'  
0 row(s) in 0.0240 seconds

hbase(main):028:0> put 'flight',5,'fsch:delay','6'  
0 row(s) in 0.0370 seconds

hbase(main):029:0> put 'flight',6,'finfo:source','mumbai'  
0 row(s) in 0.0290 seconds

hbase(main):030:0> put 'flight',6,'finfo:dest','bengloar'  
0 row(s) in 0.0400 seconds

hbase(main):031:0> put 'flight',6,'fsch:at','2.7a.m.'  
0 row(s) in 0.0310 seconds

hbase(main):032:0> put 'flight',6,'fsch:dt','5.01a.m.'  
0 row(s) in 0.0350 seconds

hbase(main):033:0> put 'flight',6,'fsch:delay','9'  
0 row(s) in 0.0250 seconds

hbase(main):034:0> put 'flight',7,'finfo:source','kolhapur'  
0 row(s) in 0.0310 seconds

```
hbase(main):035:0> put 'flight',7,'finfo:dest','bengloar'
0 row(s) in 0.0280 seconds
```

```
hbase(main):036:0> put 'flight',7,'fsch:at','8.7a.m.'
0 row(s) in 0.0350 seconds
```

```
hbase(main):037:0> put 'flight',7,'fsch:dt','12.01p.m.'
0 row(s) in 0.0500 seconds
```

```
hbase(main):038:0> put 'flight',7,'fsch:delay','3'
0 row(s) in 0.0370 seconds
```

- Display of data:

```
hbase(main):039:0> scan 'flight'
```

ROW	COLUMN+CELL
1	column=finfo:source, timestamp=1579706455715, value=pune
1	column=fsch:at, timestamp=1579706722547, value=11.11a.m.
1	column=fsch:delay, timestamp=1579706848134, value=4
1	column=fsch:dt, timestamp=1579706785170, value=12.50p.m.
2	column=finfo:dest, timestamp=1579706896798, value=kolhapur
2	column=finfo:source, timestamp=1579706867351, value=pune
2	column=fsch:at, timestamp=1579706914569, value=11.10a.m.
2	column=fsch:delay, timestamp=1579706952029, value=4
2	column=fsch:dt, timestamp=1579706928539, value=12.10p.m.
3	column=finfo:dest, timestamp=1579706983667, value=jalgaon
3	column=finfo:source, timestamp=1579706967913, value=pune
3	column=fsch:at, timestamp=1579706994825, value=10.10a.m.
3	column=fsch:delay, timestamp=1579707025823, value=10
3	column=fsch:dt, timestamp=1579707013992, value=10.10p.m.
4	column=finfo:dest, timestamp=1579707054479, value=sangli
4	column=finfo:source, timestamp=1579707034036, value=pune
4	column=fsch:at, timestamp=1579707067331, value=1.10a.m.
4	column=fsch:delay, timestamp=1579707089685, value=1
4	column=fsch:dt, timestamp=1579707079962, value=3.10a.m.
5	column=finfo:dest, timestamp=1579707131123, value=aurangabad
5	column=finfo:source, timestamp=1579707108218, value=pune
5	column=fsch:at, timestamp=1579707147134, value=2.10a.m.
5	column=fsch:delay, timestamp=1579707191533, value=6
5	column=fsch:dt, timestamp=1579707168592, value=3.01a.m.
6	column=finfo:dest, timestamp=1579707233228, value=bengloar
6	column=finfo:source, timestamp=1579707213890, value=mumbai
6	column=fsch:at, timestamp=1579707247230, value=2.7a.m.
6	column=fsch:delay, timestamp=1579707284486, value=9
6	column=fsch:dt, timestamp=1579707261426, value=5.01a.m.
7	column=finfo:dest, timestamp=1579707315336, value=bengloar
7	column=finfo:source, timestamp=1579707306909, value=kolhapur
7	column=fsch:at, timestamp=1579707324609, value=8.7a.m.
7	column=fsch:delay, timestamp=1579707379868, value=3
7	column=fsch:dt, timestamp=1579707353927, value=12.01p.m.

7 row(s) in 1.4100 seconds

hbase(main):040:0> alter 'flight',NAME=>'revenue'

Updating all regions with the new schema...

0/1 regions updated.

0/1 regions updated.

1/1 regions updated.

Done.

0 row(s) in 5.4780 seconds

hbase(main):041:0> scan 'flight'

ROW	COLUMN+CELL
1	column=finfo:source, timestamp=1579706455715, value=pune
1	column=fsch:at, timestamp=1579706722547, value=11.11a.m.
1	column=fsch:delay, timestamp=1579706848134, value=4
1	column=fsch:dt, timestamp=1579706785170, value=12.50p.m.
2	column=finfo:dest, timestamp=1579706896798, value=kolhapur
2	column=finfo:source, timestamp=1579706867351, value=pune
2	column=fsch:at, timestamp=1579706914569, value=11.10a.m.
2	column=fsch:delay, timestamp=1579706952029, value=4
2	column=fsch:dt, timestamp=1579706928539, value=12.10p.m.
3	column=finfo:dest, timestamp=1579706983667, value=jalgaon
3	column=finfo:source, timestamp=1579706967913, value=pune
3	column=fsch:at, timestamp=1579706994825, value=10.10a.m.
3	column=fsch:delay, timestamp=1579707025823, value=10
3	column=fsch:dt, timestamp=1579707013992, value=10.10p.m.
4	column=finfo:dest, timestamp=1579707054479, value=sangli
4	column=finfo:source, timestamp=1579707034036, value=pune
4	column=fsch:at, timestamp=1579707067331, value=1.10a.m.
4	column=fsch:delay, timestamp=1579707089685, value=1
4	column=fsch:dt, timestamp=1579707079962, value=3.10a.m.
5	column=finfo:dest, timestamp=1579707131123, value=aurangab ad
5	column=finfo:source, timestamp=1579707108218, value=pune
5	column=fsch:at, timestamp=1579707147134, value=2.10a.m.
5	column=fsch:delay, timestamp=1579707191533, value=6
5	column=fsch:dt, timestamp=1579707168592, value=3.01a.m.
6	column=finfo:dest, timestamp=1579707233228, value=bengloar
6	column=finfo:source, timestamp=1579707213890, value=mumbai
6	column=fsch:at, timestamp=1579707247230, value=2.7a.m.
6	column=fsch:delay, timestamp=1579707284486, value=9
6	column=fsch:dt, timestamp=1579707261426, value=5.01a.m.
7	column=finfo:dest, timestamp=1579707315336, value=bengloar
7	column=finfo:source, timestamp=1579707306909, value=kolhap ur
7	column=fsch:at, timestamp=1579707324609, value=8.7a.m.
7	column=fsch:delay, timestamp=1579707379868, value=3
7	column=fsch:dt, timestamp=1579707353927, value=12.01p.m.

7 row(s) in 0.9270 seconds

```
hbase(main):042:0> put 'flight',4,'revenue:rs','5000'
0 row(s) in 1.1700 seconds
```

```
hbase(main):043:0> scan 'flight'
```

ROW	COLUMN+CELL
1	column=finfo:source, timestamp=1579706455715, value=pune
1	column=fsch:at, timestamp=1579706722547, value=11.11a.m.
1	column=fsch:delay, timestamp=1579706848134, value=4
1	column=fsch:dt, timestamp=1579706785170, value=12.50p.m.
2	column=finfo:dest, timestamp=1579706896798, value=kolhapur
2	column=finfo:source, timestamp=1579706867351, value=pune
2	column=fsch:at, timestamp=1579706914569, value=11.10a.m.
2	column=fsch:delay, timestamp=1579706952029, value=4
2	column=fsch:dt, timestamp=1579706928539, value=12.10p.m.
3	column=finfo:dest, timestamp=1579706983667, value=jalgaon
3	column=finfo:source, timestamp=1579706967913, value=pune
3	column=fsch:at, timestamp=1579706994825, value=10.10a.m.
3	column=fsch:delay, timestamp=1579707025823, value=10
3	column=fsch:dt, timestamp=1579707013992, value=10.10p.m.
4	column=finfo:dest, timestamp=1579707054479, value=sangli
4	column=finfo:source, timestamp=1579707034036, value=pune
4	column=fsch:at, timestamp=1579707067331, value=1.10a.m.
4	column=fsch:delay, timestamp=1579707089685, value=1
4	column=fsch:dt, timestamp=1579707079962, value=3.10a.m.
4	column=revenue:rs, timestamp=1579708017867, value=5000
5	column=finfo:dest, timestamp=1579707131123, value=aurangab ad
5	column=finfo:source, timestamp=1579707108218, value=pune
5	column=fsch:at, timestamp=1579707147134, value=2.10a.m.
5	column=fsch:delay, timestamp=1579707191533, value=6
5	column=fsch:dt, timestamp=1579707168592, value=3.01a.m.
6	column=finfo:dest, timestamp=1579707233228, value=bengloar
6	column=finfo:source, timestamp=1579707213890, value=mumbai
6	column=fsch:at, timestamp=1579707247230, value=2.7a.m.
6	column=fsch:delay, timestamp=1579707284486, value=9
6	column=fsch:dt, timestamp=1579707261426, value=5.01a.m.
7	column=finfo:dest, timestamp=1579707315336, value=bengloar
7	column=finfo:source, timestamp=1579707306909, value=kolhap ur
7	column=fsch:at, timestamp=1579707324609, value=8.7a.m.
7	column=fsch:delay, timestamp=1579707379868, value=3
7	column=fsch:dt, timestamp=1579707353927, value=12.01p.m.

```
7 row(s) in 0.7760 seconds
```

```
hbase(main):044:0> create 'tb1','cf'
0 row(s) in 2.5490 seconds
```

```
=> Hbase::Table - tb1
```

```
hbase(main):045:0> drop 'tb1'
```

ERROR: Table tb1 is enabled. Disable it first.

Here is some help for this command:

- Drop of the table in hbase:

Drop the named table. Table must first be disabled:

```
hbase> drop 't1'
```

```
hbase> drop 'ns1:t1'
```

```
hbase(main):046:0> list
```

```
TABLE
```

```
CustomerInformation
```

```
flight
```

```
tb1
```

```
3 row(s) in 0.0690 seconds
```

```
=> ["CustomerInformation", "flight", "tb1"]
```

```
hbase(main):047:0> disable 'tb1'
```

```
0 row(s) in 2.5040 seconds
```

```
hbase(main):048:0> drop 'tb1'
```

```
0 row(s) in 1.5540 seconds
```

```
hbase(main):049:0> list
```

```
TABLE
```

```
CustomerInformation
```

```
flight
```

```
2 row(s) in 0.0330 seconds
```

```
=> ["CustomerInformation", "flight"]
```

```
hbase(main):050:0> get 'flight',3
```

```
COLUMN
```

```
CELL
```

```
finfo:dest      timestamp=1579706983667, value=jalgaon
```

```
finfo:source    timestamp=1579706967913, value=pune
```

```
fsch:at         timestamp=1579706994825, value=10.10a.m.
```

```
fsch:delay      timestamp=1579707025823, value=10
```

```
fsch:dt         timestamp=1579707013992, value=10.10p.m.
```

```
1 row(s) in 0.3750 seconds
```

```
hbase(main):051:0> get 'flight','4',COLUMN=>'finfo:source'
```

```
COLUMN
```

```
CELL
```

```
finfo:source    timestamp=1579707034036, value=pune
```

```
1 row(s) in 0.1490 seconds
```

```
hbase(main):052:0> get 'flight','3',COLUMN=>['finfo:source','finfo:dest']
```

```
COLUMN
```

```
CELL
```

```
finfo:dest      timestamp=1579706983667, value=jalgaon
```

```
finfo:source    timestamp=1579706967913, value=pune
```

```
1 row(s) in 0.0690 seconds
```



```
hbase(main):053:0> get 'flight',5
```

COLUMN	CELL
finfo:dest	timestamp=1579707131123, value=aurangabad
finfo:source	timestamp=1579707108218, value=pune
fsch:at	timestamp=1579707147134, value=2.10a.m.
fsch:delay	timestamp=1579707191533, value=6
fsch:dt	timestamp=1579707168592, value=3.01a.m.

1 row(s) in 0.1250 seconds

```
hbase(main):054:0> get 'flight','5',COLUMN=>['finfo:source','finfo:dest']
```

COLUMN	CELL
finfo:dest	timestamp=1579707131123, value=aurangabad
finfo:source	timestamp=1579707108218, value=pune

1 row(s) in 0.1000 seconds

```
hbase(main):055:0> get 'flight','5',COLUMN=>'finfo:source'
```

COLUMN	CELL
finfo:source	timestamp=1579707108218, value=pune

1 row(s) in 0.0950 seconds

```
hbase(main):056:0> scan 'flight',COLUMNS=>'finfo:source'
```

ROW	COLUMN+CELL
1	column=finfo:source, timestamp=1579706455715, value=pune
2	column=finfo:source, timestamp=1579706867351, value=pune
3	column=finfo:source, timestamp=1579706967913, value=pune
4	column=finfo:source, timestamp=1579707034036, value=pune
5	column=finfo:source, timestamp=1579707108218, value=pune
6	column=finfo:source, timestamp=1579707213890, value=mumbai
7	column=finfo:source, timestamp=1579707306909, value=kolhapur

7 row(s) in 0.2920 seconds

```
hbase(main):057:0> create 'emphive', 'cf'
```

0 row(s) in 2.4830 seconds

=> Hbase::Table – emphive

- customer table in hbase

```
hbase(main):001:0> create 'CustomerInformation','ContactInfo','CustomerName'
```

0 row(s) in 5.5920 seconds

=> Hbase::Table - CustomerInformation

```
hbase(main):001:0> list
```

TABLE  
CustomerInformation  
emphive

flight

3 row(s) in 1.6070 seconds

=> ["CustomerInformation", "emphive", "flight"]

hbase(main):002:0> put 'CustomerInformation',1,'ContactInfo:email\_id','abc12@gmail.com'

0 row(s) in 1.3750 seconds

0 row(s) in 0.0990 seconds

hbase(main):004:0> put 'CustomerInformation',1,'ContactInfo:Address','pune'

0 row(s) in 0.0550 seconds

hbase(main):005:0> put 'CustomerInformation',1,'ContactInfo:First\_name','abc'

0 row(s) in 0.0510 seconds

hbase(main):006:0> put 'CustomerInformation',1,'ContactInfo:Middle\_name','ABC'

0 row(s) in 0.0650 seconds

hbase(main):007:0> put 'CustomerInformation',1,'ContactInfo:Last\_name','AbC'

0 row(s) in 0.1000 seconds

hbase(main):008:0> put 'CustomerInformation',2,'ContactInfo:email\_id','pooja@gmail.com'

0 row(s) in 0.0950 seconds

hbase(main):009:0> put 'CustomerInformation',1,'ContactInfo:Address','kolhapur'

0 row(s) in 0.0570 seconds

hbase(main):010:0> put 'CustomerInformation',2,'ContactInfo:First\_name','pooja'

0 row(s) in 0.0530 seconds

hbase(main):011:0> put 'CustomerInformation',2,'ContactInfo:Middle\_name','surykant'

0 row(s) in 0.0660 seconds

hbase(main):012:0> put 'CustomerInformation',2,'ContactInfo:Last\_name','kanwate'

0 row(s) in 0.1040 seconds

hbase(main):013:0> put 'CustomerInformation',3,'ContactInfo:email\_id','minal@gmail.com'

0 row(s) in 0.0590 seconds

hbase(main):014:0> put 'CustomerInformation',3,'ContactInfo:Address','jalgaon'

0 row(s) in 0.1120 seconds

hbase(main):015:0> put 'CustomerInformation',3,'ContactInfo:First\_name','minal'

0 row(s) in 0.0550 seconds

hbase(main):016:0> put 'CustomerInformation',3,'ContactInfo:Middle\_name','dilip'

0 row(s) in 0.0530 seconds

hbase(main):017:0> put 'CustomerInformation',3,'ContactInfo:Last\_name','barhate'

0 row(s) in 0.0780 seconds

```

hbase(main):018:0> scan 'CustomerInformation'
ROW                                COLUMN+CELL
1                                  column=ContactInfo:Address, timestamp=1579712487830,
value=kolhapur
1                                  column=ContactInfo:First_name, timestamp=1579712391715,
value=abc
1                                  column=ContactInfo:Last_name, timestamp=1579712445301,
value=AbC
1                                  column=ContactInfo:Middle_name,
timestamp=1579712427068, value=ABC
1                                  column=ContactInfo:email_id, timestamp=1579712271094,
value=abc12@gmail.com
2                                  column=ContactInfo:First_name, timestamp=1579712528844,
value=pooja
2                                  column=ContactInfo:Last_name, timestamp=1579712591138,
value=kanwate
2                                  column=ContactInfo:Middle_name,
timestamp=1579712552618, value=surykant
2                                  column=ContactInfo:email_id, timestamp=1579712469400,
value=pooja@gmail.com
3                                  column=ContactInfo:Address, timestamp=1579712634827,
value=jalgaon
3                                  column=ContactInfo:First_name, timestamp=1579712650119,
value=minal
3                                  column=ContactInfo:Last_name, timestamp=1579712685408,
value=barhate
3                                  column=ContactInfo:Middle_name,
timestamp=1579712666188, value=dilip
3                                  column=ContactInfo:email_id, timestamp=1579712613067,
value=minal@gmail.com
3 row(s) in 1.0950 seconds

```

- External Connection between hive and hbase

```

hduser@ubuntu:~$ jps
2464 DataNode
2339 NameNode
2692 SecondaryNameNode
2853 ResourceManager
2989 NodeManager
3023 Jps
hduser@ubuntu:~$ hive

```

```

Logging initialized using configuration in jar:file:/usr/lib/hive/lib/hive-common-1.2.2.jar!/hive-
log4j.properties
hive> show databases;
OK
default
Time taken: 3.892 seconds, Fetched: 1 row(s)
hive> create database pooja;
OK

```

Time taken: 0.991 seconds  
hive> show databases;  
OK  
default  
pooja  
Time taken: 0.206 seconds, Fetched: 2 row(s)  
hive> use pooja;  
OK  
Time taken: 0.159 seconds

- Table creation for connectivity:

hive> create table empdata300(ename string,esal int)  
> row format delimited fields terminated by "," stored as textfile  
> location "/home/pooja/empdata300";  
OK  
Time taken: 2.344 seconds  
  
hive> show tables;  
OK  
empdata300  
Time taken: 0.335 seconds, Fetched: 1 row(s)  
hive> drop table empdata300;  
OK  
Time taken: 5.194 seconds  
hive> create table empdata300(ename string,esal int)  
> row format delimited fields terminated by "," stored as textfile  
> location "/home/pooja/Desktop/empdata300";  
OK  
Time taken: 0.447 seconds

- Loading the data in the table:

hive> load data local inpath '/home/pooja/Desktop/empdb300.txt' into table  
empdata300;hduser@ubuntu:~\$ hive

Logging initialized using configuration in jar:file:/usr/lib/hive/lib/hive-common-1.2.2.jar!/hive-  
log4j.properties

hive> load data local inpath '/home/pooja/Desktop/empdb300.txt' into table empdata300;  
FAILED: SemanticException [Error 10001]: Line 1:70 Table not found 'empdata300'

hive> drop table empdata300;

OK

Time taken: 0.503 seconds

hive> show databases;

OK

default

pooja

hive> create table empdata300(ename string,esal int)  
> row format delimited fields terminated by "," stored as textfile  
> location "/home/ubuntu/Desktop/empdb300";

OK

Time taken: 0.385 seconds

hive> select \* from empdata300;

OK

```
NULL
NULL
Pooja 100000
abc 70000
XYZ 80000
pqr 30000
str 40000
Sujata 20000
```

Time taken: 1.386 seconds, Fetched: 8 row(s)

```
hive> create external table hive_table_emp300(id int,name string,esal string)
> stored by 'org.apache.hadoop.hive.hbase.HBaseStorageHandler'
> with SERDEPROPERTIES("hbase.columns.mapping"=":key,cf:name,cf:esal")
> TBLPROPERTIES("hbase.table.name"="emphive");
```

OK

Time taken: 1.877 seconds

```
hive> create table empdbnew300(eno int,ename string,esal int) row format
> delimited fields terminated by ',' stored as textfile;
```

OK

Time taken: 0.419 seconds

```
hive> load data local inpath '/home/pooja/Desktop/empdbnew300.txt' into table empdbnew300;
Loading data to table minal.empdbnew300
```

Table minal.empdbnew300 stats: [numFiles=1, totalSize=78]

OK

Time taken: 1.401 seconds

```
hive> select * from empdbnew300;
```

OK

```
1      Pooja  100000
2      abc    70000
3      XYZ    80000
4      pqr    30000
5      str    40000
6      Sujata 20000
```

Time taken: 0.498 seconds, Fetched: 6 row(s)

```
hive> show tables;
```

OK

empdata300

empdbnew300

hive\_table\_emp300

Time taken: 0.281 seconds, Fetched: 3 row(s)

```
hive> select * from hive_table_emp300;
```

OK

Time taken: 0.424 seconds

```
hive> select * from empdbnew300 where esal > 7000;
```

OK

```
1      Pooja  100000
2      abc    70000
3      XYZ    80000
4      pqr    30000
5      str    40000
6      Sujata 20000
```

Time taken: 0.661 seconds, Fetched: 6 row(s)

```
hive> create external table hbase_flight_new300(fno int,fsource string,fdest string,fsh_at string,
fsh_dt string,fsch_delay string)
```

```
> stored by 'org.apache.hadoop.hive.hbase.HBaseStorageHandler'
```

```
> with
```

```
SERDEPROPERTIES("hbase.columns.mapping"=":key,finfo:source,finfo:dest,fsch:at,fsch:dt,fsch
:delay")
```

```

> TBLPROPERTIES("hbase.table.name"="flight");
OK
Time taken: 0.863 seconds
hive> show tables
>;
OK
empdata300
empdbnew300
hbase_flight_new300
hive_table_emp300
Time taken: 0.232 seconds, Fetched: 4 row(s)

```

- Connection Occurred in the hive from the hbase table:

```

hive> select * from hbase_flight_new300;
OK
1      pune      NULL  11.11a.m.      12.50p.m.      4
2      pune      kolhapur      11.10a.m.      12.10p.m.      4
3      pune      jalgaon  10.10a.m.      10.10p.m.      10
4      pune      sangli  1.10a.m.      3.10a.m.      1
5      pune      aurangabad  2.10a.m.      3.01a.m.      6
6      mumbai bengloar      2.7a.m.  5.01a.m.      9
7      kolhapur      bengloar      8.7a.m.  12.01p.m.      3
Time taken: 0.696 seconds, Fetched: 7 row(s)

```

- Average Command:

```

hive> select avg(fsch_delay) from hbase_flight_new300;
Query ID = hduser_20200122204425_b7258dfb-7df8-4c1a-af39-4665a8dbc69c
Total jobs = 1
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapreduce.job.reduces=<number>
Starting Job = job_1579750852930_0002, Tracking URL =
http://localhost:8088/proxy/application_1579750852930_0002/
Kill Command = /usr/local/hadoop/bin/hadoop job -kill job_1579750852930_0002
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2020-01-22 20:45:27,966 Stage-1 map = 0%, reduce = 0%
2020-01-22 20:45:57,679 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 9.91 sec
2020-01-22 20:46:21,346 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 14.29 sec
MapReduce Total cumulative CPU time: 14 seconds 290 msec
Ended Job = job_1579750852930_0002
MapReduce Jobs Launched:
Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 14.29 sec HDFS Read: 8270 HDFS Write:
18 SUCCESS
Total MapReduce CPU Time Spent: 14 seconds 290 msec
OK
5.285714285714286
Time taken: 118.729 seconds, Fetched: 1 row(s)
hive> CREATE INDEX hbaseflightnew_index1

```

```

> ON TABLE hbase_flight_new300(fsch_delay)
> AS 'org.apache.hadoop.hive.ql.index.compact.CompactIndexHandler'
> WITH DEFERRED REBUILD;
OK
Time taken: 1.369 seconds
hive> show index on hbase_flight_new300;
OK
hbasefltnew_index1      hbase_flight_new300      fsch_delay
      minal__hbase_flight_new300_hbasefltnew_index1__      compact
Time taken: 0.498 seconds, Fetched: 1 row(s)
hive> create table empinfo300(empno int,empgrade string) row format delimited
      > fields terminated by ',' stored as textfile;
OK
Time taken: 0.385 seconds
hive>
      > ;
hive> load data local inpath '/home/pooja/Desktop/empinfo300.txt' into table empinfo300;
Loading data to table minal.empinfo300
Table minal.empinfo300 stats: [numFiles=1, totalSize=24]
OK
Time taken: 1.345 seconds
hive> select * from empinfo300;
OK
1      a
2      b
3      c
4      d
5      e
6      f
Time taken: 0.491 seconds, Fetched: 6 row(s)

```

Output Connectivity hive and hbase Screenshot:

```
Terminal
hadoop-2.9.2.targz  daprac2.c  pranali_daa  ass4output.odt
SLVI_Assign1_Hadoop  Assign1_TemperatureAnalysis  SL_VILAB MANUAL.pdf

hduser@ubuntu:~$
hduser@ubuntu:~$ hbase create external table hbase_flight_new(fno int,fsource string,fdest string,fsh_at string,fsh_dt string,fsch_delay string)
> stored by 'org.apache.hadoop.hbase.HBaseStorageHandler'
> With SERDEPROPERTIES("hbase.columns.mapping"=":key,finfo:source,finfo:dest,fsch:at,fsch:dt,fsch:delay")
> TBLPROPERTIES("hbase.table.name"="flight");
OK
Time taken: 1.104 seconds
hduser@ubuntu:~$ hbase show tables;
OK
hduser@ubuntu:~$ hbase flight new
hbase flight_new300
Time taken: 1.431 seconds, Fetched: 2 row(s)
hduser@ubuntu:~$ hbase select * from hbase_flight_new;
OK
1  pune  NULL  11.11a.m.  12.50p.m.  4
2  pune  kolhapur  11.10a.m.  12.10p.m.  4
3  pune  jalgaon  10.10a.m.  10.10p.m.  10
4  pune  sangli  1.10a.m.  3.10a.m.  1
5  pune  aurangabad  2.10a.m.  3.01a.m.  6
6  munbat  bengloar  2.7a.m.  5.01a.m.  9
7  kolhapur  bengloar  9.7a.m.  12.01p.m.  3
Time taken: 3.446 seconds, Fetched: 7 row(s)
hduser@ubuntu:~$
hduser@ubuntu:~$ hbase install
hbase installation commands.odt
empinfo300.txt
DAAAPran.odt  ass3.c  HBASE HIVE HADOOP.docx  externalcon.txt
ass2.pdf  DAA2M.odt  hbase steps
ass2M.c  DAA2P.odt  pd

hduser@ubuntu:~$ hbase(main):005:0> flight
NameError: undefined local variable or method 'flight' for #<Object:0x764a3e5d>
hduser@ubuntu:~$ hbase(main):006:0> scan 'flight'
COLUMN=CELL
ROW
1  column=finfo:source, timestamp=1579706455715, value=pune
1  column=fsch:at, timestamp=1579706722547, value=11.11a.m.
1  column=fsch:delay, timestamp=1579706848136, value=4
1  column=fsch:dt, timestamp=1579706785170, value=12.50p.m.
2  column=finfo:source, timestamp=1579706896798, value=kolhapur
2  column=fsch:at, timestamp=1579706914569, value=11.10a.m.
2  column=fsch:delay, timestamp=1579706952029, value=4
2  column=fsch:dt, timestamp=1579706928339, value=12.10p.m.
3  column=finfo:source, timestamp=1579706983667, value=jalgaon
3  column=finfo:source, timestamp=1579706967913, value=pune
3  column=fsch:at, timestamp=1579706994825, value=10.10a.m.
3  column=fsch:delay, timestamp=1579707025823, value=10
3  column=fsch:dt, timestamp=1579707013992, value=10.10p.m.
4  column=finfo:source, timestamp=1579707054479, value=sangli
4  column=finfo:source, timestamp=1579707034036, value=pune
4  column=fsch:at, timestamp=1579707067331, value=1.10a.m.
4  column=fsch:delay, timestamp=1579707089685, value=1
4  column=fsch:dt, timestamp=1579707079962, value=3.10a.m.
4  column=revenue:rs, timestamp=1579708017867, value=5880
5  column=finfo:source, timestamp=1579707131123, value=aurangabad
5  column=finfo:source, timestamp=1579707180218, value=pune
5  column=fsch:at, timestamp=1579707147134, value=2.10a.m.
5  column=fsch:delay, timestamp=1579707191533, value=6
5  column=fsch:dt, timestamp=1579707168592, value=3.01a.m.
6  column=finfo:source, timestamp=1579707233228, value=bengloar
6  column=finfo:source, timestamp=1579707213890, value=munbat
6  column=fsch:at, timestamp=1579707247236, value=2.7a.m.
6  column=fsch:delay, timestamp=1579707264686, value=9
6  column=fsch:dt, timestamp=1579707261426, value=5.01a.m.
7  column=finfo:source, timestamp=1579707315336, value=bengloar
7  column=finfo:source, timestamp=1579707306909, value=kolhapur
7  column=fsch:at, timestamp=1579707324609, value=9.7a.m.
7  column=fsch:delay, timestamp=1579707379866, value=3
7  column=fsch:dt, timestamp=1579707353927, value=12.01p.m.
7 row(s) in 2.3036 seconds
hduser@ubuntu:~$ hbase(main):007:0>
hduser@ubuntu:~$ hbase(main):008:0>
```