

## ASSIGNMENT 10.2

Student.txt

```
StudentName,sector,DOB,qualification,score,state,randomName
ABROSER,goverenment,18-11-2002,MBBS,3.5,Pennsylvania,prattville*
ALEXANDER,goverenment,20-10-2000,BSC,2.5,vermont,gadsden+
ALEXANDER,private,20-10-2000,BE,8.5,arizona,decatur!
ALEXANDER,goverenment,01-01-2003,BTECH,4.5,oregon,huntsville/
AGNEW,goverenment,20-10-2000,BCOM,7.5,california,dothan@
ATNEST,goverenment,20-10-2000,MTECH,8.5,arizona,decatur!
BELL,goverenment,10-07-2004,BBA,9.5,alaska,auburn~
BURR,goverenment,12-12-2001,BE,100,alabama,madison`
BURD,goverenment,20-10-2000,ME,6.5,louisiana,hoover#
BACHTEL,goverenment,28-04-2005,BE,100,alabama,madison`
MULVETS,goverenment,20-10-2000,MS,8.5,arizona,decatur!
BURTNER,goverenment,20-10-2000,BE,100,alabama,madison`
BLOOM,goverenment,20-10-2000,BE,4.5,oregon,huntsville/
BECHTEL,goverenment,20-10-2000,BE,5.5,Maryland,tuscaloosa$
GAFF,goverenment,18-11-2002,BE,100,alabama,madison`
CLARK,private,20-10-2000,BE,100,alabama,madison`
COOTS,goverenment,20-10-2000,BSC,100,alabama,madison`
DUNSDILL,goverenment,20-10-2000,BE,100,alabama,madison`
DORONES,goverenment,20-10-2000,BTECH,100,alabama,madison`
DICKY,goverenment,20-10-2000,BBA,100,alabama,madison`
DARRAH,goverenment,20-10-2000,BE,100,alabama,madison`
DAVIS,goverenment,20-10-2000,BE,9.5,alaska,auburn~
DICKIS,goverenment,20-10-2000,MBBS,100,alabama,madison`
HUFSELLEN,private,20-10-2000,MTECH,100,alabama,madison`
BLOOM,goverenment,20-10-2000,MS,4.5,oregon,huntsville/
FUNK,goverenment,20-10-2000,BE,100,alabama,madison`
FORE,goverenment,20-10-2000,BE,100,alabama,madison`
FLECKINGER,goverenment,20-10-2000,BE,100,alabama,madison`
FLECKINGER,goverenment,20-10-2000,BCOM,100,alabama,madison`
FLECKINGER,goverenment,20-10-2000,BBA,100,alabama,madison`
GIBSON,goverenment,20-10-2000,BE,100,alabama,madison`
GODARD,goverenment,20-10-2000,BE,100,alabama,madison`
GORDON,goverenment,20-10-2000,ME,100,alabama,madison`
HEFFLEY,goverenment,20-10-2000,BE,6.5,louisiana,hoover#
HARVMAN,goverenment,12-12-2001,BE,100,alabama,madison`
HUNTER,goverenment,28-04-2005,BE,100,alabama,madison`
"student.txt" [dos] 470L, 26204C
```

copying the data set in to HDFS which will be further loaded into HBase.

```
[hadoop@acadgild ~]$ hadoop dfs -put AcadgildStudent /
DEPRECATED: Use of this script to execute hdfs command is deprecated.
Instead use the hdfs command for it.

Java HotSpot(TM) Client VM warning: You have loaded library /home/hadoop/HADOOP/hadoop-2.6.0/lib/native/libhadoop.so.1.0.0 which might have disabled stack guard
. The VM will try to fix the stack guard now.
It's highly recommended that you fix the library with 'execstack -c <libfile>',
or link it with '-z noexecstack'.
15/12/25 10:17:07 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
[hadoop@acadgild ~]$
```

PIG\_CLASSPATH=/home/hadoop/HADOOP/hbase-0.98.4-hadoop2/lib/hbase-server-0.98.4-hadoop2:/home/hadoop/HADOOP/hbase-0.98.4-hadoop2/lib/hbase-\*.jar;

```
[hadoop@acadgild ~]$ PIG_CLASSPATH=/home/hadoop/HADOOP/hbase-0.98.4-hadoop2/lib/hbase-server-0.98.4-hadoop2:/home/hadoop/HADOOP/hbase-0.98.4-hadoop2/lib/hbase-*.jar;
[hadoop@acadgild ~]$
```

```
[hadoop@acadgild ~]$ hbase shell
2015-12-25 10:21:38,683 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 0.98.4-hadoop2, r890e852celc51b7lad180f626b71a2a1009246da, Mon Jul 14 19:45:06 PDT 2014
```

```
hbase(main):001:0> create 'studentAcad','student data'
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/home/hadoop/HADOOP/hbase-0.98.4-hadoop2/lib/slf4j-log4j12-1.6.4.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/home/hadoop/HADOOP/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.
Java HotSpot(TM) Client VM warning: You have loaded library /home/hadoop/HADOOP/hadoop-2.6.0/lib/native/libhadoop.so.1.0.0 which might have disabled stack guard
. The VM will try to fix the stack guard now.
It's highly recommended that you fix the library with 'execstack -c <libfile>',
or link it with '-z noexecstack'.
2015-12-25 10:22:21,014 WARN [main] util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
0 row(s) in 2.5480 seconds

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

inside PIG mode we can load data from HDFS to Alias relation

```

grunt> rawD = LOAD '/AcadgildStudent' USING PigStorage(',') AS (StudentName:chararray,sector:chararray,DOB:chararray,qalification:chararray,score:int,state:chararray,randomName:chararray);
2015-12-25 11:24:30,092 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.defaultFS
2015-12-25 11:24:30,093 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapreduce.job.counters.limit is deprecated. Instead, use mapreduce.job.counter
s.max
2015-12-25 11:24:30,093 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, use dfs.bytes-per-checksum
grunt>

```

```

grunt> STORE rawD INTO 'hbase://studentAcad' USING org.apache.pig.backend.hadoop.hbase.HBaseStorage('student_data:StudentName,student_data:sector,student_data:DOB,stu
dent_data:qalification,student_data:score,student_data:state,student_data:randomName');

```

Once the success message comes as shown below , it is confirmed our data is loaded inside HBase.

```

2015-12-25 11:29:54,663 [main] INFO org.apache.hadoop.mapred.ClientServiceDe
legate - Application state is completed. FinalApplicationStatus=SUCCEEDED. Re
directing to job history server
2015-12-25 11:29:54,634 [main] INFO org.apache.hadoop.yarn.client.RMProxy -
Connecting to ResourceManager at /0.0.0.0:8032
2015-12-25 11:29:54,636 [main] INFO org.apache.hadoop.mapred.ClientServiceDe
legate - Application state is completed. FinalApplicationStatus=SUCCEEDED. Re
directing to job history server
2015-12-25 11:29:54,668 [main] WARN org.apache.pig.backend.hadoop.executione
ngine.mapReduceLayer.MapReduceLauncher - Unable to retrieve job to compute wa
rning aggregation.
2015-12-25 11:29:54,668 [main] INFO org.apache.pig.backend.hadoop.executione
ngine.mapReduceLayer.MapReduceLauncher - Success!
grunt>

```

Result:



```
hbase(main):009:0> scan 'studentAcad'
ROW                                COLUMN+CELL
ABROSER                           column=student_data:DOB, timestamp=1451024947263, value=MB
BS
ABROSER                           column=student_data:StudentName, timestamp=1451024947263,
value=goverenment
ABROSER                           column=student_data:qalification, timestamp=1451024947263,
value=3
ABROSER                           column=student_data:score, timestamp=1451024947263, value=
Pennsylvania
ABROSER                           column=student_data:sector, timestamp=1451024947263, value
=18-11-2002
ABROSER                           column=student_data:state, timestamp=1451024947263, value=
prattville*
AGNEW                             column=student_data:DOB, timestamp=1451024947271, value=BC
OM
AGNEW                             column=student_data:StudentName, timestamp=1451024947271,
value=goverenment
AGNEW                             column=student_data:qalification, timestamp=1451024947271,
value=7
AGNEW                             column=student_data:score, timestamp=1451024947271, value=
california
AGNEW                             column=student_data:sector, timestamp=1451024947271, value
```