



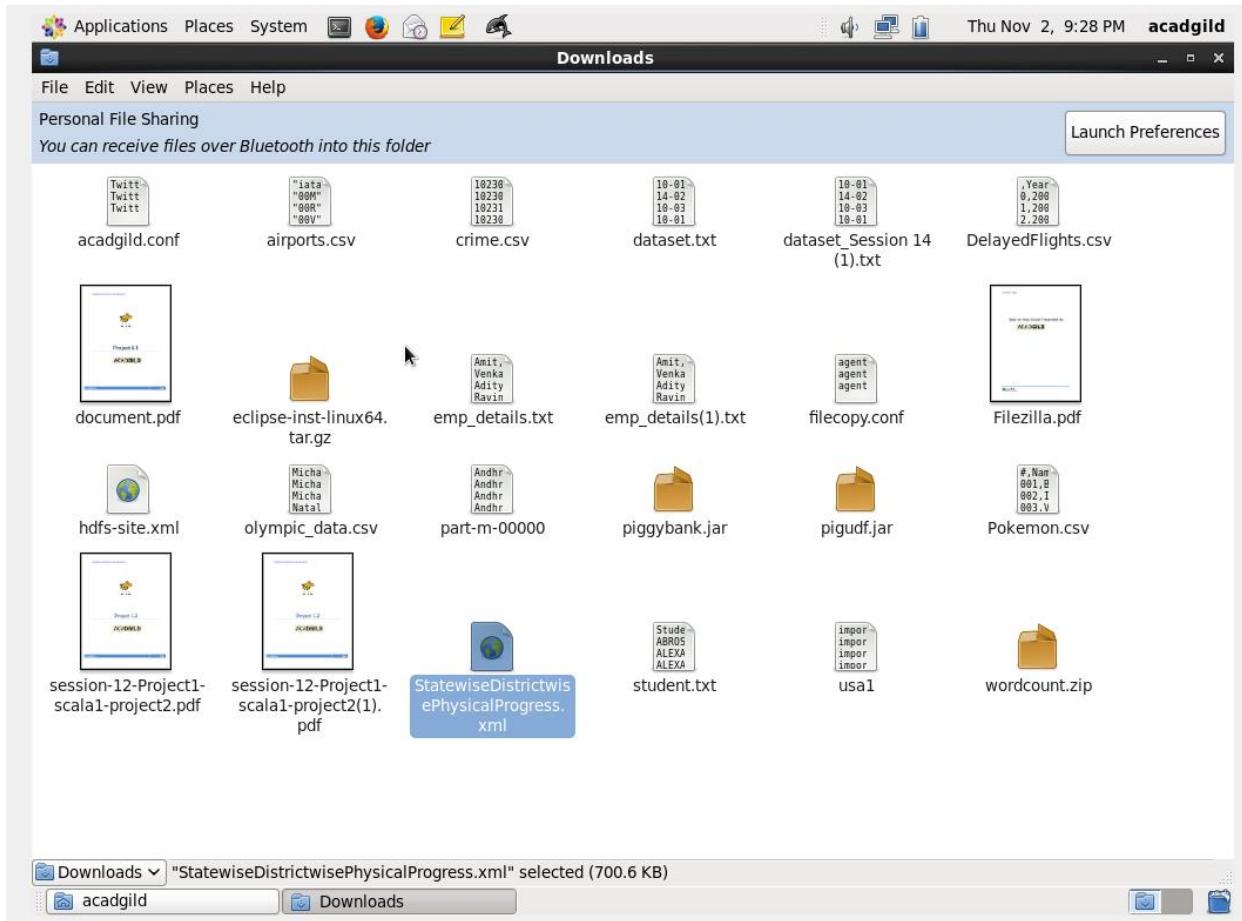
Project 1.2



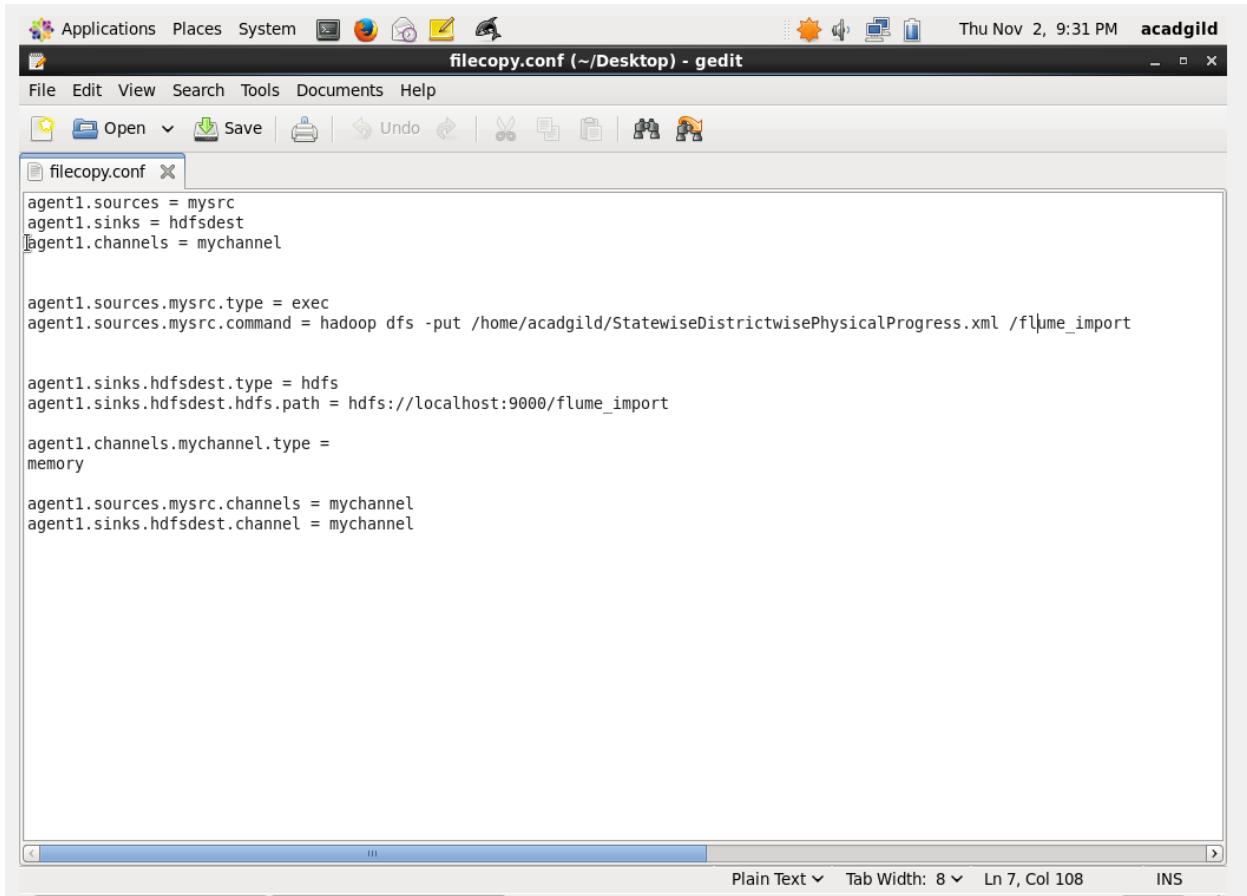
Project 2.1- State-Wise Development Analysis In India

Downloaded the data set from given link and stored it into Download Directory of local machine.

<https://drive.google.com/file/d/0Bxr27gVaXO5sUjd2RWFO3hQQUE/view?usp=sharing>



Created a config file to transfer file from local filesystem to HDFS using Flume



The screenshot shows a GIMP window titled "filecopy.conf (~/Desktop) - gedit". The window contains the following Flume configuration code:

```
agent1.sources = mysrc
agent1.sinks = hdfsdest
agent1.channels = mychannel

agent1.sources.mysrc.type = exec
agent1.sources.mysrc.command = hadoop dfs -put /home/acadgild/StatewiseDistrictwisePhysicalProgress.xml /flume_import

agent1.sinks.hdfsdest.type = hdfs
agent1.sinks.hdfsdest.hdfs.path = hdfs://localhost:9000/flume_import

agent1.channels.mychannel.type =
memory

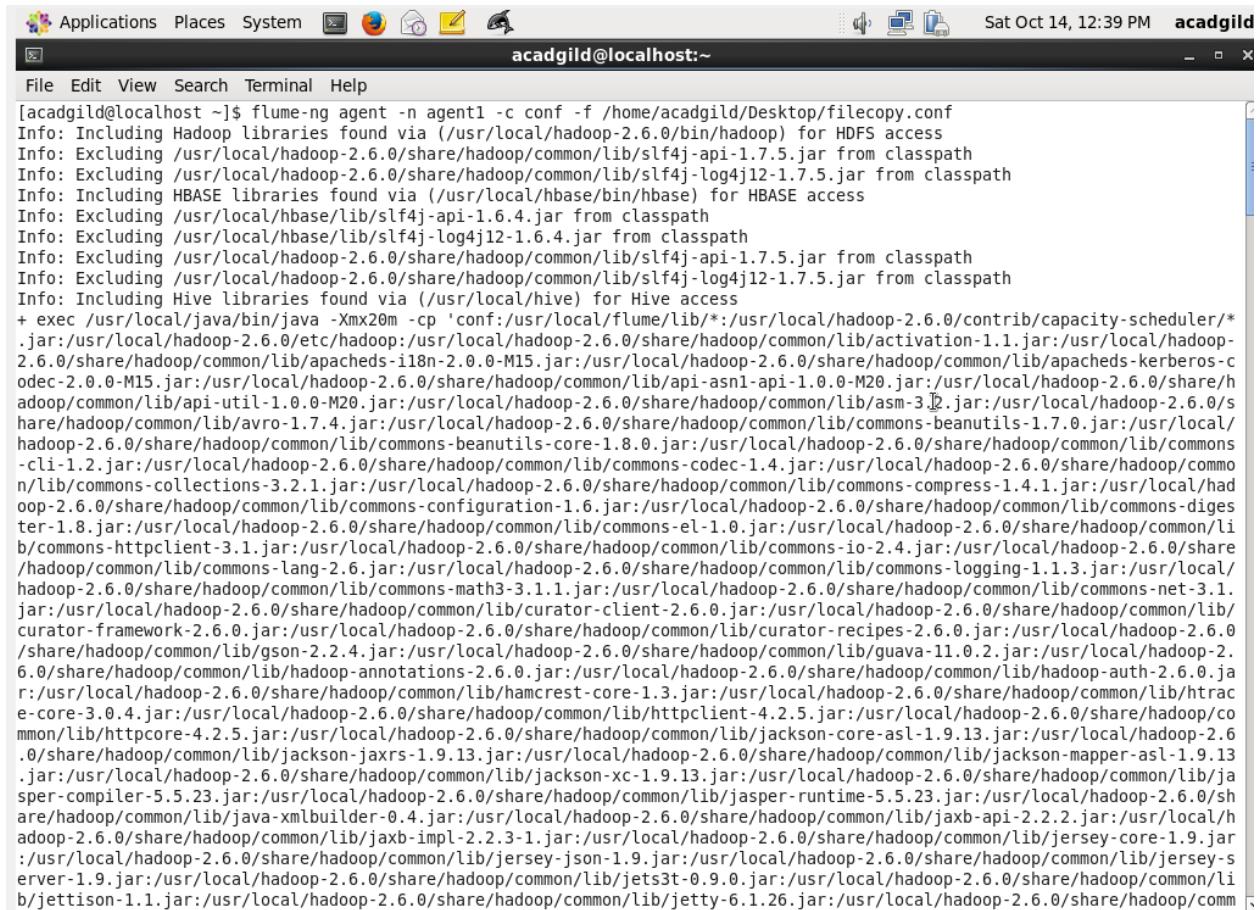
agent1.sources.mysrc.channels = mychannel
agent1.sinks.hdfsdest.channel = mychannel
```

The status bar at the bottom right indicates "Plain Text" mode, "Tab Width: 8", and "Ln 7, Col 108".

Run the command to perform flume operation

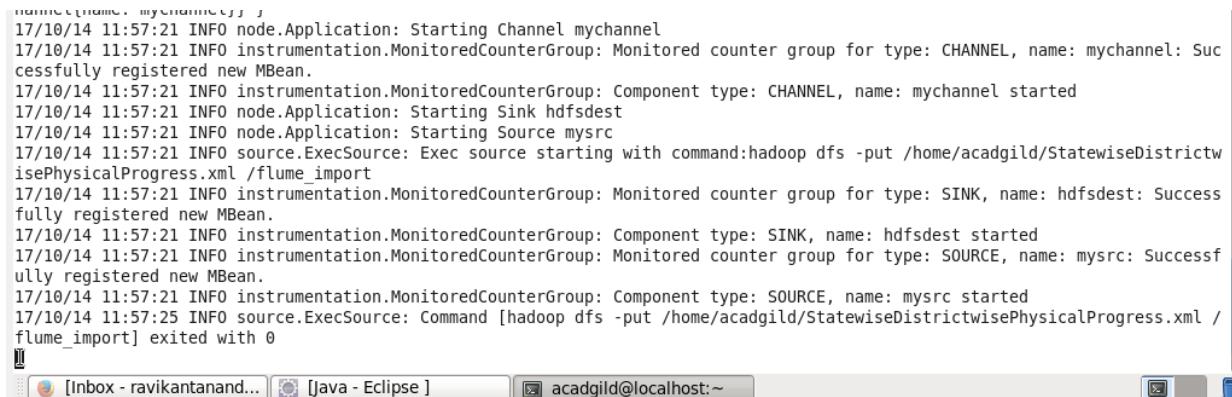
```
Flume-ng agent -n agent1 -c conf -f /home/acadgild/Desktop/filecopy.conf
```

Big Data and Hadoop Development



```
[acadgild@localhost ~]$ flume-ng agent -n agent1 -c conf -f /home/acadgild/Desktop/filecopy.conf
Info: Including Hadoop libraries found via (/usr/local/hadoop-2.6.0/bin/hadoop) for HDFS access
Info: Excluding /usr/local/hadoop-2.6.0/share/hadoop/common/lib/slf4j-api-1.7.5.jar from classpath
Info: Excluding /usr/local/hadoop-2.6.0/share/hadoop/common/lib/slf4j-log4j12-1.7.5.jar from classpath
Info: Including HBASE libraries found via (/usr/local/hbase/bin/hbase) for HBASE access
Info: Excluding /usr/local/hbase/lib/slf4j-api-1.6.4.jar from classpath
Info: Excluding /usr/local/hbase/lib/slf4j-log4j12-1.6.4.jar from classpath
Info: Excluding /usr/local/hadoop-2.6.0/share/hadoop/common/lib/slf4j-api-1.7.5.jar from classpath
Info: Excluding /usr/local/hadoop-2.6.0/share/hadoop/common/lib/slf4j-log4j12-1.7.5.jar from classpath
Info: Including Hive libraries found via (/usr/local/hive) for Hive access
+ exec /usr/local/java/bin/java -Xmx20m -cp 'conf:/usr/local/flume/lib/*:/usr/local/hadoop-2.6.0/contrib/capacity-scheduler/*.jar:/usr/local/hadoop-2.6.0/etc/hadoop:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/activation-1.1.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/apacheds-i18n-2.0.0-M15.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/apacheds-kerberos-codec-2.0.0-M15.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/api-asn1-api-1.0.0-M20.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/api-util-1.0.0-M20.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/asm-3.2.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/avro-1.7.4.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-beanutils-1.7.0.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-beanutils-core-1.8.0.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-cli-1.2.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-codec-1.4.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-collections-3.2.1.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-compress-1.4.1.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-configuration-1.6.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-digester-1.8.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-el-1.0.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-httpclient-3.1.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-io-2.4.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-lang-2.6.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-logging-1.1.3.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-math3-3.1.1.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/commons-net-3.1.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/curator-client-2.6.0.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/curator-framework-2.6.0.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/curator-recipes-2.6.0.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/gson-2.2.4.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/guava-11.0.2.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/hadoop-annotations-2.6.0.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/hadoop-auth-2.6.0.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/hamcrest-core-1.3.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/htrace-core-3.0.4.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/httpclient-4.2.5.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/httpcore-4.2.5.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jackson-core-asl-1.9.13.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jackson-jaxrs-1.9.13.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jackson-mapper-asl-1.9.13.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jackson-xc-1.9.13.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jasper-compiler-5.5.23.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jasper-runtime-5.5.23.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/java-xmlbuilder-0.4.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jaxb-api-2.2.2.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jaxb-impl-2.2.3-1.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jersey-core-1.9.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jersey-json-1.9.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jets3t-0.9.0.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jettison-1.1.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/lib/jetty-6.1.26.jar:/usr/local/hadoop-2.6.0/share/hadoop/common/comm
```

Flume operation succeeded as we got the exited value 0.

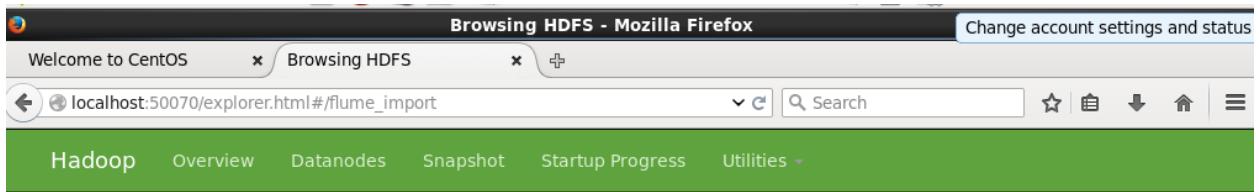


```
17/10/14 11:57:21 INFO node.Application: Starting Channel mychannel
17/10/14 11:57:21 INFO instrumentation.MonitoringCounterGroup: Monitored counter group for type: CHANNEL, name: mychannel: Successfully registered new MBean.
17/10/14 11:57:21 INFO instrumentation.MonitoringCounterGroup: Component type: CHANNEL, name: mychannel started
17/10/14 11:57:21 INFO node.Application: Starting Sink hdfsdest
17/10/14 11:57:21 INFO node.Application: Starting Source mysrc
17/10/14 11:57:21 INFO source.ExecSource: Exec source starting with command:hadoop dfs -put /home/acadgild/StatewiseDistrictwisePhysicalProgress.xml /flume_import
17/10/14 11:57:21 INFO instrumentation.MonitoringCounterGroup: Monitored counter group for type: SINK, name: hdfsdest: Successfully registered new MBean.
17/10/14 11:57:21 INFO instrumentation.MonitoringCounterGroup: Component type: SINK, name: hdfsdest started
17/10/14 11:57:21 INFO instrumentation.MonitoringCounterGroup: Monitored counter group for type: SOURCE, name: mysrc: Successfully registered new MBean.
17/10/14 11:57:21 INFO instrumentation.MonitoringCounterGroup: Component type: SOURCE, name: mysrc started
17/10/14 11:57:25 INFO source.ExecSource: Command [hadoop dfs -put /home/acadgild/StatewiseDistrictwisePhysicalProgress.xml /flume_import] exited with 0
```

Big Data and Hadoop Development

Checked the HDFS file System

```
[acadgild@localhost ~]$ hadoop fs -ls /flume_import
17/10/14 12:43:53 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
Found 1 items
-rw-r--r-- 1 acadgild supergroup 717414 2017-10-14 11:57 /flume_import/StatewiseDistrictwisePhysicalProgress.xml
[acadgild@localhost ~]$
```



Browse Directory

/flume_import

Permission	Owner	Group	Size	Replication	Block Size	Name
-rw-r--r--	acadgild	supergroup	700.6 KB	1	128 MB	StatewiseDistrictwisePhysicalProgress.xml

Hadoop, 2014.

Problem statement

Find out the districts who achieved 100 percent objective in BPL cards

Export the results to mysql using sqoop

As the input file is in XML format, Pig script is used to parse the data into csv file. The parsed data in csv format is stored in csvfile directory.

```
grunt> A = load '/flume_import/StatewiseDistrictwisePhysicalProgress.xml'  
USING  
org.apache.pig.piggybank.storage.XMLLoader('row') as (x:chararray);
```

```
grunt> B = foreach A generate REPLACE(x,'[\n]', '') as x;  
  
grunt> C = foreach B generate  
REGEX_EXTRACT_ALL(x,.*(?:<State_Name>)(&[^<]*).*(?  
<District_Name>)(&[^<]*).*(?:<Project_Objectives_IHHL_BPL>)(&[^<]*).*(?:<Project  
_  
Objectives_IHHL_APL>)(&[^<]*).*(?:<Project_Objectives_IHHL_TOTAL>)(&[^<]*).*(?:  
<Pr  
object_Objectives_SCW>)(&[^<]*).*(?:<Project_Objectives_School_Toilets>)(&[^<]*).*  
(  
?:<Project_Objectives_Anganwadi_Toilets>)(&[^<]*).*(?:<Project_Objectives_RSM>  
)([  
^<]*).*(?:<Project_Objectives_PC>)(&[^<]*).*(?:<Project_Performance-  
IHHL_BPL>)(&[^<]*).*(?:<Project_Performance-IHHL_TO  
IHHL_APL>)(&[^<]*).*(?:<Project_Performance-IHHL_TO  
TAL>)(&[^<]*).*(?:<Project_Performance-SCW>)(&[^<]*).*(?:<Project_Performance-  
Scho  
ol_Toilets>)(&[^<]*).*(?:<Project_Performance-  
Anganwadi_Toilets>)(&[^<]*).*(?:<Pro  
ject_Performance-RSM>)(&[^<]*).*(?:<Project_Performance-PC>)(&[^<]*).*');
```

Big Data and Hadoop Development

```
grunt> D = foreach C GENERATE FLATTEN ((\$0));
```

```
grunt> A = load '/flume_import/StatewiseDistrictwisePhysicalProgress.xml' USING
org.apache.pig.piggybank.storage.XMLLoader('row') as (x:chararray);
2017-10-27 19:47:56,731 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapreduce.job.counters.limit is deprecated. Instead, use mapreduce.job.counters.max
2017-10-27 19:47:56,732 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, use dfs.bytes-per-checksum
2017-10-27 19:47:56,732 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.defaultFS
grunt> B = foreach A generate REPLACE(x,'[\n]', '') as x;
grunt> C = foreach B generate REGEX_EXTRACT_ALL(x, '.*(?:<State_Name>) ([^<]*).*(?:<District_Name>) ([^<]*).*(?:<Project_Objectives_IHHL_BPL>) ([^<]*).*(?:<Project_Objectives_IHHL_APL>) ([^<]*).*(?:<Project_Objectives_IHHL_TOTAL>) ([^<]*).*(?:<Project_Objectives_SCW>) ([^<]*).*(?:<Project_Objectives_School_Toilets>) ([^<]*).*(?:<Project_Objectives_Anganwadi_Toilets>) ([^<]*).*(?:<Project_Objectives_RSM>) ([^<]*).*(?:<Project_Objectives_PC>) ([^<]*).*(?:<Project_Performance-IHHL_BPL>) ([^<]*).*(?:<Project_Performance-IHHL_APL>) ([^<]*).*(?:<Project_Performance-IHHL_TOTAL>) ([^<>*].*(?:<Project_Performance-SCW>) ([^<>*].*(?:<Project_Performance-School_Toilets>) ([^<>*].*(?:<Project_Performance-Anganwadi_Toilets>) ([^<>*].*(?:<Project_Performance-RSM>) ([^<>*].*(?:<Project_Performance-PC>) ([^<>*].*'));
```

```
grunt> D = foreach C GENERATE FLATTEN ((\$0));
```

```
grunt> Store D into '/csvfile' USING PigStorage(',');
```

Big Data and Hadoop Development

```
grunt> Store D into '/csvfile' USING PigStorage(',');
2017-10-27 20:19:17,218 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapreduce.job.counters.limit is deprecated. Instead, use mapreduce.job.jobcounters.max
2017-10-27 20:19:17,218 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, use dfs.bytes-per-checksum
2017-10-27 20:19:17,219 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.defaultFS
2017-10-27 20:19:17,238 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapred.textoutputformat.separator is deprecated. Instead, use mapreduce.output.textoutputformat.separator
2017-10-27 20:19:17,270 [main] INFO org.apache.pig.tools.pigstats.ScriptState - Pig features used in the script: UNKNOWN
2017-10-27 20:19:17,322 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.defaultFS
2017-10-27 20:19:17,322 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapreduce.job.counters.limit is deprecated. Instead, use mapreduce.job.jobcounters.max
2017-10-27 20:19:17,324 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, use dfs.bytes-per-checksum
2017-10-27 20:19:17,325 [main] INFO org.apache.pig.data.SchemaTupleBackend - Key [pig.schematuple] was not set... will not generate code.
2017-10-27 20:19:17,327 [main] INFO org.apache.pig.newplan.logical.optimizer.LogicalPlanOptimizer - {RULES_ENABLED=[AddForEach, ColumnMapKeyPrune, ConstantCalculator, GroupByConstParallelSetter, LimitOptimizer, LoadTypeCastInserter, MergeFilter, MergeForEach, PartitionFilterOptimizer, PredicatePushdownOptimizer, PushDownForEachFlatten, PushUpFilter, SplitFilter, StreamTypeCastInserter]}
2017-10-27 20:19:17,335 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MRCompiler - File concatenation threshold: 100 optimistic? false
2017-10-27 20:19:17,336 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MultiQueryOptimizer - MR plan size before optimization: 1
2017-10-27 20:19:17,336 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MultiQueryOptimizer - MR plan size after optimization: 1
2017-10-27 20:19:17,350 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.defaultFS
2017-10-27 20:19:17,350 [main] INFO org.apache.hadoop.conf.Configuration.deprec
```

Big Data and Hadoop Development

```
2017-10-27 20:19:33,502 [main] INFO org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-10-27 20:19:33,506 [main] INFO org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalApplicationStatus=SUCCEEDED. Redirecting to job history server
2017-10-27 20:19:33,553 [main] INFO org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-10-27 20:19:33,556 [main] INFO org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalApplicationStatus=SUCCEEDED. Redirecting to job history server
2017-10-27 20:19:33,608 [main] INFO org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-10-27 20:19:33,615 [main] INFO org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalApplicationStatus=SUCCEEDED. Redirecting to job history server
2017-10-27 20:19:33,662 [main] WARN org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Unable to retrieve job to compute warning aggregation.
2017-10-27 20:19:33,662 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Success!
grunt> 
```

```
[acadgild@localhost ~]$ hadoop fs -ls /csvfile/
17/10/27 20:25:18 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin Java classes where applicable
Found 2 items
-rw-r--r--    1 acadgild supergroup          0 2017-10-27 20:19 /csvfile/_SUCCESS
-rw-r--r--    1 acadgild supergroup  55135 2017-10-27 20:19 /csvfile/part-m-00000
```

Big Data and Hadoop Development

```
[acadgild@localhost ~]$ hadoop fs -cat /csvfile/part-m-00000
17/10/27 20:25:59 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Andhra Pradesh,ADILABAD,247475,148181,395656,0,4462,427,10,0,176300,52431,228731,0,4462,427,0,0
Andhra Pradesh,ANANTAPUR,363314,181335,544649,0,3421,284,10,0,366557,42000,408557,0,4258,302,0,0
Andhra Pradesh,CHITTOOR,296465,236986,533451,0,8171,375,10,0,269750,190905,460655,0,8171,375,11,0
Andhra Pradesh,CUDDAPAH,251653,251610,503263,0,6802,277,10,0,239780,125493,365273,0,5431,277,0,0
Andhra Pradesh,EAST GODAVARI,370255,191400,561655,50,7004,1164,10,0,347305,191400,538705,49,7004,781,20,0
Andhra Pradesh,GUNTUR,370996,319053,690049,0,5346,215,10,0,269608,85950,355558,0,5116,215,37,0
Andhra Pradesh,KARIMNAGAR,365267,219763,585030,0,5848,298,10,0,369433,63025,432458,0,5848,298,13,0
Andhra Pradesh,KHAMMAM,189225,4860,194085,0,6318,521,10,0,195763,4870,200633,0,6318,521,15,10
Andhra Pradesh,KRISHNA,351572,175991,527563,17,3374,62,10,0,318730,104197,422927,8,3374,171,40,0
Andhra Pradesh,KURNool,383478,129956,513434,0,4669,2111,10,0,323616,174773,498389,13,4669,248,49,0
Andhra Pradesh,MAHBUBNAGAR,418559,66032,484591,3,5433,357,10,0,242169,263280,505449,9,5434,357,15,0
Andhra Pradesh,MEDAK,311743,96490,408233,50,5446,1873,10,0,310591,47977,358568,14,4752,1049,10,0
Andhra Pradesh,NALGONDA,215058,156761,371819,0,6628,44,10,0,224813,87693,312506,0,6487,395,10,10
Andhra Pradesh,NELLORE,226725,116678,343403,0,6415,1396,10,0,169111,19462,188573,0,5839,476,0,0
Andhra Pradesh,NIZAMABAD,225519,9474,234993,0,2477,32,10,0,225519,64759,290278,0,2477,32,36,0
Andhra Pradesh,PRAKASAM,386617,193493,580110,0,7224,780,10,0,306266,143238,449504,0,7195,770,41,0
Andhra Pradesh,RANGAREDDI,212629,71610,284239,0,3726,467,10,0,174460,69147,243607,0,3726,467,10,0
Andhra Pradesh,SRIKAKULAM,302221,225272,527493,40,6398,266,10,0,117379,82270,199649,16,5580,128,15,3
Andhra Pradesh,VISAKHAPATNAM,252875,156460,409335,20,5074,0,10,0,178731,75765,254496,20,6378,559,0,0
Andhra Pradesh,VIZIANAGARAM,220051,245678,465729,10,2999,1668,10,0,166713,159984,326697,8,3368,350,12,0
Andhra Pradesh,WARANGAL,330260,138180,468440,0,4122,2157,10,0,359732,345450,705182,0,4122,477,0,0
Andhra Pradesh,WEST GODAVARI,344272,294425,638697,385,4551,216,10,0,319477,294425,613902,837,4524,316,97,0
Arunachal Pradesh,ANJAW,3232,0,3232,8,44,46,1,0,1490,0,1490,2,48,48,0,0
Arunachal Pradesh,CHANGLANG,15716,2799,18515,25,384,250,0,0,6785,2450,9235,19,384,218,1,0
Arunachal Pradesh,DIBANG VALLEY,1085,0,1085,0,102,27,0,0,1088,0,1088,0,40,10,0,0
Arunachal Pradesh,EAST KAMENG,7016,1280,8296,25,288,216,0,0,4626,1280,5906,2,288,216,0,0
Arunachal Pradesh,EAST SIANG,8222,4723,12945,25,244,42,6,0,4537,1718,6255,0,244,50,0,0
Arunachal Pradesh,KURUNG KUMEY,22036,0,22036,30,684,164,0,0,11671,0,11671,2,684,164,0,0
Arunachal Pradesh,LOHIT,8800,0,8800,26,240,182,0,0,8410,1129,9539,23,240,182,1,0
Arunachal Pradesh,LOWER DIBANG VALLEY,2366,1200,3566,0,134,82,0,0,1513,1200,2713,0,134,82,0,0
Arunachal Pradesh,LOWER SUBANSIRI,5766,1164,6930,26,232,119,3,0,4516,1164,5680,19,232,119,3,0
Arunachal Pradesh,PAPUM PARE,1268,3778,5046,17,140,113,8,0,267,3778,4045,3,140,113,0,0
```

Data formatting done now we need to find out the districts who achieved 100 percent objective in BPL cards

```
G = load '/csvfile/part-m-00000' USING PigStorage(',') AS
(State_Name:chararray,District_Name:chararray,Project_Objectives_IHHL_BPL:float,
Project_Objectives_IHHL_APL:float,Project_Objectives_IHHL_TOTAL:float,Project_Objectives_SCW:float,Project_Objectives_School_Toilets:float,Project_Objectives_Anganwadi_Toilets:float,Project_Objectives_RSM:float,Project_Objectives_PC:float,Project_Performance_IHHL_BPL:float,Project_Performance_IHHL_APL:float,Project_Performance_IHHL_TOTAL:float,Project_Performance_SCW:float,Project_Performance_School_Toilets:float,Project_Performance_Anganwadi_Toilets:float,Project_Performance_RSM:float,Project_Performance_PC:float);
```

Big Data and Hadoop Development

```
grunt> G = load '/csvfile/part-m-00000' USING PigStorage(',') AS (State_Name:chararray,District_Name:chararray,Project_Objectives_IHHL_BPL:float,Project_Objectives_IHHL_AP1:float,Project_Objectives_IHHL_TOTAL:float,Project_Objectives_SCW:float,Project_Objectives_School>Toilets:float,Project_Objectives_Anganwadi>Toilets:float,Project_Objectives_RSM:float,Project_Objectives_PC:float,Project_Performance_IHHL_BPL:float,Project_Performance_IHHL_AP1:float,Project_Performance_IHHL_TOTAL:float,Project_Performance_SCW:float,Project_Performance_School>Toilets:float,Project_Performance_Anganwadi>Toilets:float,Project_Performance_RSM:float,Project_Performance_PC:float);
```

```
grunt> H = FOREACH G GENERATE State_Name,  
District_Name,(Project_Performance_IHHL_BPL/Project_Objectives_IHHL_BPL)*1  
00 as percent;
```

```
grunt> K = Filter H BY percent>=100;
```

```
grunt> H = FOREACH G GENERATE State_Name, District_Name,(Project_Performance_IHHL_BPL/Project_Objectives_IHHL_BPL)*100 as percent;  
2017-10-28 22:33:41,051 [main] WARN org.apache.pig.newplan.BaseOperatorPlan - Encountered Warning IMPLICIT_CAST_TO_FLOAT 1 time(s).  
grunt> K = Filter H BY percent>=100;
```

```
grunt> Store K into '/Que1' using PigStorage(',');
```

Big Data and Hadoop Development

```
grunt> Store K into '/Quel' using PigStorage(',');
2017-10-28 22:36:58,171 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapreduce.job.counters.limit is deprecated. Instead, use mapreduce.job.counters.max
2017-10-28 22:36:58,176 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, use dfs.bytes-per-checksum
2017-10-28 22:36:58,176 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.defaultFS
2017-10-28 22:36:58,176 [main] WARN org.apache.pig.newplan.BaseOperatorPlan - Encountered Warning IMPLICIT_CAST_TO_FLOAT 2 time(s).
2017-10-28 22:36:58,193 [main] WARN org.apache.pig.newplan.BaseOperatorPlan - Encountered Warning IMPLICIT_CAST_TO_FLOAT 2 time(s).
2017-10-28 22:36:58,199 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapred.textoutputformat.separator is deprecated. Instead, use mapreduce.output.textoutputformat.separator
2017-10-28 22:36:58,225 [main] INFO org.apache.pig.tools.pigstats.ScriptState - Pig features used in the script: FILTER
2017-10-28 22:36:58,271 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.defaultFS
2017-10-28 22:36:58,271 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapreduce.job.counters.limit is deprecated. Instead, use mapreduce.job.counters.max
2017-10-28 22:36:58,272 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, use dfs.bytes-per-checksum
2017-10-28 22:36:58,272 [main] WARN org.apache.pig.data.SchemaTupleBackend - SchemaTupleBackend has already been initialized
2017-10-28 22:36:58,272 [main] INFO org.apache.pig.newplan.logical.optimizer.LogicalPlanOptimizer - {RULES_ENABLED=[AddForEach, ColumnMapKeyPrune, ConstantCalculator, GroupByConstParallelSetter, LimitOptimizer, LoadTypeCastInserter, MergeFilter, MergeForEach, PartitionFilterOptimizer, PredicatePushdownOptimizer, PushDownForEachFlatten, PushUpFilter, SplitFilter, StreamTypeCastInserter]}
2017-10-28 22:36:58,301 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.defaultFS
2017-10-28 22:36:58,301 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapreduce.job.counters.limit is deprecated. Instead, use mapreduce.job.counters.max
2017-10-28 22:36:58,305 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, use dfs.bytes-per-checksum
2017-10-28 22:36:58,348 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - fs.default.name is deprecated. Instead, use fs.defaultFS
2017-10-28 22:36:58,348 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - mapreduce.job.counters.limit is deprecated. Instead, use mapreduce.job.counters.max
2017-10-28 22:36:58,349 [main] INFO org.apache.hadoop.conf.Configuration.deprecation - io.bytes.per.checksum is deprecated. Instead, use dfs.bytes-per-checksum
2017-10-28 22:36:58,356 [main] INFO org.apache.pig.newplan.logical.rules.ColumnPruneVisitor - Columns pruned for G: $3, $4, $5, $6, $7
2017-10-28 22:36:58,356 [main] INFO org.apache.pig.newplan.logical.rules.ColumnPruneVisitor - Columns pruned for G: $3, $4, $5, $6, $7
2017-10-28 22:36:58,356 [main] INFO org.apache.pig.newplan.logical.rules.ColumnPruneVisitor - Columns pruned for G: $3, $4, $5, $6, $7
```

```
=====
Success!

Job Stats (time in seconds):
JobId   Maps   Reduces  MaxMapTime    MinMapTime     AvgMapTime      MedianMapTime   MaxReduceTime  MinReduceTime   AvgReduceTime M
edianReducetime Alias  Feature Outputs
job_1509209314483_0003 1       0        3           3            3             0              0              0              0             G,H,K   MAP_ONLY      /Quel

Input(s):
Successfully read 0 records from: "/csvfile/part-m-00000"

Output(s):
Successfully stored 0 records in: "/Quel"

Counters:
Total records written : 0
Total bytes written : 0
Spillable Memory Manager spill count : 0
Total bags proactively spilled: 0
Total records proactively spilled: 0

Job DAG:
job_1509209314483_0003

2017-10-28 22:37:14,615 [main] INFO org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-10-28 22:37:14,627 [main] INFO org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalApplicationStatus=SUCCEEDED. Redirecting to job history server
2017-10-28 22:37:14,694 [main] INFO org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-10-28 22:37:14,697 [main] INFO org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalApplicationStatus=SUCCEEDED. Redirecting to job history server
2017-10-28 22:37:14,757 [main] INFO org.apache.hadoop.yarn.client.RMProxy - Connecting to ResourceManager at /0.0.0.0:8032
2017-10-28 22:37:14,764 [main] INFO org.apache.hadoop.mapred.ClientServiceDelegate - Application state is completed. FinalApplicationStatus=SUCCEEDED. Redirecting to job history server
2017-10-28 22:37:14,822 [main] WARN org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Unable to retrieve job to compute warning aggregation.
2017-10-28 22:37:14,822 [main] INFO org.apache.pig.backend.hadoop.executionengine.mapReduceLayer.MapReduceLauncher - Success!
grunt> 
```

Big Data and Hadoop Development

```
[acadgild@localhost ~]$ hadoop fs -ls /Que1/
```

```
[acadgild@localhost ~]$ hadoop fs -ls /Que1/
17/10/28 22:37:42 WARN util.NativeCodeLoader: Unable to load native-hadoop library if available
Found 2 items
-rw-r--r--  1 acadgild supergroup          0 2017-10-28 22:37 /Que1/_SUCCESS
-rw-r--r--  1 acadgild supergroup      5278 2017-10-28 22:37 /Que1/part-m-00000
```

```
[acadgild@localhost ~]$ hadoop fs -cat /Que1/part-m-00000
```

Big Data and Hadoop Development

```
[acadgild@localhost ~]$ hadoop fs -cat /Que1/part-m-00000
17/10/28 22:37:58 WARN util.NativeCodeLoader: Unable to load native-hadoop library applicable
Andhra Pradesh,ANANTAPUR,100.89262
Andhra Pradesh,KARIMNAGAR,101.14053
Andhra Pradesh,KHAMMAM,103.45515
Andhra Pradesh,NALGONDA,104.53599
Andhra Pradesh,NIZAMABAD,100.0
Andhra Pradesh,WARANGAL,108.923874
Arunachal Pradesh,DIBANG VALLEY,100.2765
Arunachal Pradesh,TIRAP,100.0
Assam,HAILAKANDI,100.0
Bihar,MADHUBANI,100.0
Bihar,VAISHALI,103.09447
Chhattisgarh,KORBA,126.22162
Goa,NORTH GOA,100.0
Gujarat,AHMEDABAD,100.0
Gujarat,BHAVNAGAR,100.82415
Gujarat,DANGS,100.0
Gujarat,JAMNAGAR,105.154144
Gujarat,MAHESANA,100.71384
Gujarat,NAVSARI,100.0
Gujarat,PATAN,102.146706
Gujarat,PORBANDAR,100.0
Gujarat,RAJKOT,100.86727
Gujarat,SURAT,100.0
Gujarat,VALSAD,127.90886
Haryana,BHIWANI,100.6129
Haryana,FARIDABAD,100.0
Haryana,GURGAON,140.86676
Haryana,HISAR,100.0
Haryana,JHAJJAR,100.0
Haryana,KARNAL,100.09136
Haryana,KURUKSHETRA,100.27126
Haryana,MAHENDRAGARH,100.0
Haryana,PANCHKULA,100.0
```

Now we need to export this data into mysql database

MySQL

Big Data and Hadoop Development

```
mysql> create database acadgild;
```

Query OK, 1 row affected (0.00 sec)

```
mysql> use acadgild;
```

Database changed

```
mysql> create table Que1(State_Name varchar(100),District_Name  
varchar(100),percent float);
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> describe Que1;
```

Field	Type	Null	Key	Default	Extra
State_Name	varchar(100)	YES		NULL	
District_Name	varchar(100)	YES		NULL	
percent	float	YES		NULL	

3 rows in set (0.00 sec)

Big Data and Hadoop Development

```
mysql> create database acadgild;
Query OK, 1 row affected (0.00 sec)

mysql> use acadgild;
Database changed
mysql> create table Quel(State_Name varchar(100),District_Name varchar(100),percent float);
Query OK, 0 rows affected (0.01 sec)

mysql> describe Quel;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| State_Name | varchar(100) | YES |   | NULL    |       |
| District_Name | varchar(100) | YES |   | NULL    |       |
| percent      | float     | YES |   | NULL    |       |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql>
```

```
mysql> GRANT ALL PRIVILEGES ON acadgild.* TO 'acadgild'@'localhost';
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> flush privileges;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> commit;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> GRANT ALL PRIVILEGES ON acadgild.* TO 'acadgild'@'localhost';
Query OK, 0 rows affected (0.00 sec)

mysql> flush privileges;
Query OK, 0 rows affected (0.00 sec)

mysql> commit;
Query OK, 0 rows affected (0.00 sec)
```

Big Data and Hadoop Development

```
[acadgild@localhost ~]$ sqoop export --connect jdbc:mysql://localhost/acadgild --username root --password root --table Que1 --export-dir /Que1
```

```
[acadgild@localhost ~]$ sqoop export --connect jdbc:mysql://localhost/acadgild --username root --password root --table Que1 --export-dir /Que1
Warning: /usr/local/sqoop/../../hcatalog does not exist! HCatalog jobs will fail.
Please set $HCAT_HOME to the root of your HCatalog installation.
Warning: /usr/local/sqoop/../../accumulo does not exist! Accumulo imports will fail.
Please set $ACCUMULO_HOME to the root of your Accumulo installation.
Warning: /usr/local/sqoop/../../zookeeper does not exist! Accumulo imports will fail.
Please set $ZOOKEEPER_HOME to the root of your Zookeeper installation.
2017-10-28 23:04:31,193 INFO  [main] sqoop.Sqoop: Running Sqoop version: 1.4.5
2017-10-28 23:04:31,215 WARN  [main] tool.BaseSqoopTool: Setting your password on the command-line is insecure. Consider using -P instead.
2017-10-28 23:04:31,452 INFO  [main] manager.MySQLManager: Preparing to use a MySQL streaming resultset.
2017-10-28 23:04:31,452 INFO  [main] tool.CodeGenTool: Beginning code generation
2017-10-28 23:04:31,772 INFO  [main] manager.SqlManager: Executing SQL statement: SELECT t.* FROM `Que1` AS t LIMIT 1
2017-10-28 23:04:31,820 INFO  [main] manager.SqlManager: Executing SQL statement: SELECT t.* FROM `Que1` AS t LIMIT 1
2017-10-28 23:04:31,824 INFO  [main] orm.CompilationManager: HADOOP_MAPRED_HOME is /usr/local/hadoop-2.6.0
Note: /tmp/sqoop-acadgild/compile/dbca808b20cd65683ad7f7686c7fd1el/Que1.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.
2017-10-28 23:04:34,188 INFO  [main] orm.CompilationManager: Writing jar file: /tmp/sqoop-acadgild/compile/dbca808b20cd65683ad7f7686c7fd1el/Que1.jar
2017-10-28 23:04:34,195 INFO  [main] mapreduce.ExportJobBase: Beginning export of Que1
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.
2017-10-28 23:04:34,504 WARN  [main] util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-jav
a classes where applicable
2017-10-28 23:04:34,513 INFO  [main] Configuration.deprecation: mapred.jar is deprecated. Instead, use mapreduce.job.jar
2017-10-28 23:04:35,375 INFO  [main] Configuration.deprecation: mapred.reduce.tasks.speculative.execution is deprecated. Instead, use mapr
educe.reduce.speculative
2017-10-28 23:04:35,383 INFO  [main] Configuration.deprecation: mapred.map.tasks.speculative.execution is deprecated. Instead, use mapr
```

```
mysql> select * from Que1;
```

Big Data and Hadoop Development

```
mysql> select * from Quel ;
+-----+-----+-----+
| State_Name | District_Name | percent |
+-----+-----+-----+
| Uttar Pradesh | AMBEDKAR NAGAR | 100 |
| Uttar Pradesh | BALRAMPUR | 100 |
| Uttar Pradesh | BARABANKI | 101.396 |
| Uttar Pradesh | BAREILLY | 100 |
| Uttar Pradesh | BIJNOR | 100 |
| Uttar Pradesh | BUDAUN | 100 |
| Uttar Pradesh | BULANDSHAHAR | 110.77 |
| Uttar Pradesh | CHANDAULI | 104.668 |
| Uttar Pradesh | CHITRAKOOT | 112 |
| Uttar Pradesh | ETAH | 111.513 |
| Uttar Pradesh | ETAWAH | 100 |
| Uttar Pradesh | FARRUKHABAD | 100 |
| Uttar Pradesh | FIROZABAD | 100 |
| Uttar Pradesh | GHAZIABAD | 100 |
| Uttar Pradesh | HARDOI | 100 |
| Uttar Pradesh | JAUNPUR | 100.37 |
| Uttar Pradesh | JHANSI | 100.498 |
| Uttar Pradesh | JYOTIBA PHULE NAGAR | 100 |
| Uttar Pradesh | KANNAUJ | 100.117 |
| Uttar Pradesh | LAKHIMPUR KHERI | 131.153 |
| Uttar Pradesh | LUCKNOW | 100 |
| Uttar Pradesh | MAHAMAYA NAGAR (HATHRAS) | 100.493 |
| Uttar Pradesh | MAHARAJGANJ | 100 |
| Uttar Pradesh | MAHOBA | 100 |
| Uttar Pradesh | MATHURA | 100.42 |
| Uttar Pradesh | MIRzapur | 100.862 |
| Uttar Pradesh | MORADABAD | 100 |
| Uttar Pradesh | MUZAFFARNAGAR | 100 |
| Uttar Pradesh | PILIBHIT | 100 |
| Uttar Pradesh | PRATAPGARH | 101.52 |
| Uttar Pradesh | RAE BARELI | 100.065 |
| Uttar Pradesh | SAHARANPUR | 100.259 |
```

Big Data and Hadoop Development

Uttar Pradesh	SAHARANPUR	100.259
Uttar Pradesh	SHAJAHANPUR	100.161
Uttar Pradesh	SONBHADRA	100
Uttar Pradesh	SULTANPUR	100
Uttarakhand	NAINITAL	126.023
Uttarakhand	RUDRAPRAYAG	105.019
West Bengal	DAKSHIN DINAJPUR	100.839
West Bengal	MIDNAPUR EAST	134.411
West Bengal	MIDNAPUR WEST	117.035
Madhya Pradesh	RAISEN	115.4
Madhya Pradesh	RAJGARH	122.283
Madhya Pradesh	RATLAM	125.814
Madhya Pradesh	REWA	121.395
Madhya Pradesh	SEHORE	224.157
Madhya Pradesh	SHAHDOL	102.104
Madhya Pradesh	SHAJAPUR	114.96
Madhya Pradesh	SHEOPUR	159.111
Madhya Pradesh	UJJAIN	113.473
Madhya Pradesh	UMARIA	134.171
Maharashtra	GADCHIROLI	100
Maharashtra	RATNAGIRI	106.744
Maharashtra	SINDHUDURG	100
Meghalaya	WEST GARO HILLS	100
Mizoram	CHAMPHAI	100
Mizoram	LAWNGTLAI	100
Punjab	BARNALA	103.757
Punjab	FATEHGARH SAHIB	105.835
Punjab	HOSHIARPUR	171.832
Punjab	LUDHIANA	103.298
Punjab	NAWANSHAHR	159.233
Punjab	S.A.S Nagar	100.424
Rajasthan	HANUMANGARH	100
Sikkim	EAST SIKKIM	111.377
Sikkim	NORTH SIKKIM	109.703
Sikkim	SOUTH SIKKIM	138.751
Sikkim	WEST SIKKIM	100.755
Tamil Nadu	DHARMAPURI	100.032

Big Data and Hadoop Development

Tamil Nadu	DHARMAPURI	100.032
Tamil Nadu	ERODE	100
Tamil Nadu	KANCHIPURAM	104.839
Tamil Nadu	KANYAKUMARI (NAGERCOIL)	111.267
Tamil Nadu	KARUR	100
Tamil Nadu	NAMAKKAL	100
Tamil Nadu	PUDUKKOTTAI	112.103
Tamil Nadu	RAMANATHAPURAM	149.246
Tamil Nadu	TIRUCHIRAPPALLI	100
Tamil Nadu	TIRUNELVELI	110.782
Tamil Nadu	TIRUVANNAMALAI	100
Tamil Nadu	TIRUVARUR	108.648
Tripura	DHALAI	100
Tripura	SOUTH TRIPURA	100
Tripura	WEST TRIPURA	100
Uttar Pradesh	AGRA	101.109
Uttar Pradesh	ALLAHABAD	107.593
Andhra Pradesh	ANANTAPUR	100.893
Andhra Pradesh	KARIMNAGAR	101.141
Andhra Pradesh	KHAMMAM	103.455
Andhra Pradesh	NALGONDA	104.536
Andhra Pradesh	NIZAMABAD	100
Andhra Pradesh	WARANGAL	108.924
Arunachal Pradesh	DIBANG VALLEY	100.276
Arunachal Pradesh	TIRAP	100
Assam	HAILAKANDI	100
Bihar	MADHUBANI	100
Bihar	VAISHALI	103.094
Chhattisgarh	KORBA	126.222
Goa	NORTH GOA	100
Gujarat	AHMEDABAD	100
Gujarat	BHAVNAGAR	100.824
Gujarat	DANGS	100
Gujarat	JAMNAGAR	105.154
Gujarat	MAHESANA	100.714
Gujarat	NAVSARI	100
Gujarat	PATAN	102.147

Big Data and Hadoop Development

Gujarat	PATAN	102.147
Gujarat	PORBANDAR	100
Gujarat	RAJKOT	100.867
Gujarat	SURAT	100
Gujarat	VALSAD	127.909
Haryana	BHIWANI	100.613
Haryana	FARIDABAD	100
Haryana	GURGAON	140.867
Haryana	HISAR	100
Haryana	JHAJJAR	100
Haryana	KARNAL	100.091
Haryana	KURUKSHETRA	100.271
Haryana	MAHENDRAGARH	100
Haryana	PANCHKULA	100
Haryana	PANIPAT	100
Haryana	ROHTAK	100
Haryana	SIRSA	100
Haryana	SONIPAT	101.651
Himachal Pradesh	BILASPUR	109.614
Himachal Pradesh	CHAMBA	131.495
Himachal Pradesh	HAMIRPUR	100
Himachal Pradesh	KANGRA	137.378
Himachal Pradesh	KINNAUR	100
Himachal Pradesh	KULLU	100
Himachal Pradesh	LAHAUL & SPITI	100
Himachal Pradesh	MANDI	100.003
Himachal Pradesh	SHIMLA	100
Himachal Pradesh	SOLAN	100
Himachal Pradesh	UNA	100
Jharkhand	DEOGHAR	100
Jharkhand	LOHARDAGA	100
Jharkhand	PURBI SINGHBHUM	130.63
Karnataka	BANGALORE RURAL	139.545
Karnataka	HASSAN	100
Karnataka	KOLAR	198.56
Karnataka	MANGALORE (DAKSHINA KANNADA)	100
Karnataka	SHIMOGA	100.571

Big Data and Hadoop Development

Karnataka	SHIMOGA	100.571
Karnataka	UDUPI	100
Kerala	ALAPPUZHA	100
Kerala	ERNAKULAM	102.438
Kerala	IDUKKI	103.488
Kerala	KANNUR	110.278
Kerala	KASARGOD	103.841
Kerala	KOLLAM	100
Kerala	KOTTAYAM	100
Kerala	KOZHIKODE	100
Kerala	MALAPPURAM	102.167
Kerala	PALAKKAD	100
Kerala	PATHANAMTHITTA	100
Kerala	THIRUVANANTHAPURAM	106.205
Kerala	TIRISSUR	104.824
Kerala	WAYANAD	100
Madhya Pradesh	ALIRAJPUR	138.577
Madhya Pradesh	ANUPPUR	139.684
Madhya Pradesh	BARWANI	111.848
Madhya Pradesh	BETUL	100.601
Madhya Pradesh	BHOPAL	156.822
Madhya Pradesh	BURHANPUR	105.586
Madhya Pradesh	DATIA	153.255
Madhya Pradesh	DEWAS	134.584
Madhya Pradesh	DHAR	119.608
Madhya Pradesh	GWALIOR	121.642
Madhya Pradesh	HARDA	133.728
Madhya Pradesh	HOSHANGABAD	164.708
Madhya Pradesh	INDORE	102.355
Madhya Pradesh	JABALPUR	110.833
Madhya Pradesh	JHABUA	115.65
Madhya Pradesh	KATNI	128.858
Madhya Pradesh	KHANDWA (EAST NIMAR)	137.382
Madhya Pradesh	KHARGONE	100.412
Madhya Pradesh	MANDSAUR	145.391
Madhya Pradesh	MORENA	122.32
Madhya Pradesh	NEEMUCH	154.167

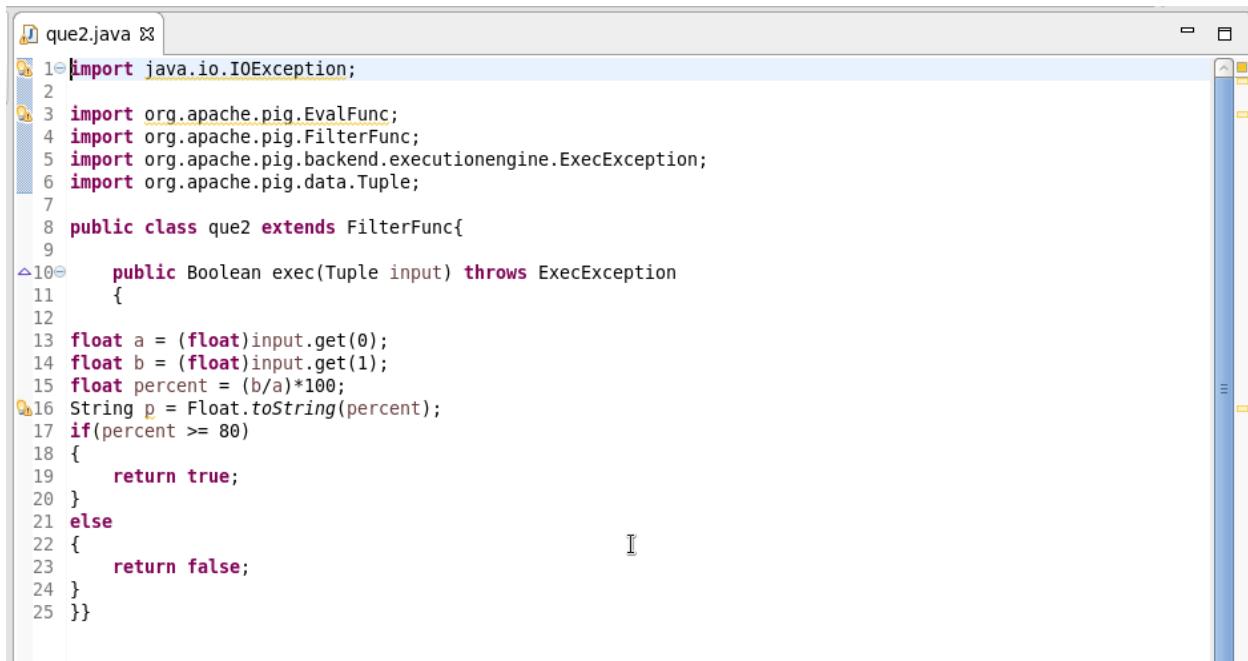
Big Data and Hadoop Development

Kerala	IDUKKI	103.488
Kerala	KANNUR	110.278
Kerala	KASARGOD	103.841
Kerala	KOLLAM	100
Kerala	KOTTAYAM	100
Kerala	KOZHIKODE	100
Kerala	MALAPPURAM	102.167
Kerala	PALAKKAD	100
Kerala	PATHANAMTHITTA	100
Kerala	THIRUVANANTHAPURAM	106.205
Kerala	TIRISSUR	104.824
Kerala	WAYANAD	100
Madhya Pradesh	ALIRAJPUR	138.577
Madhya Pradesh	ANUPPUR	139.684
Madhya Pradesh	BARWANI	111.848
Madhya Pradesh	BETUL	100.601
Madhya Pradesh	BHOPAL	156.822
Madhya Pradesh	BURHANPUR	105.586
Madhya Pradesh	DATIA	153.255
Madhya Pradesh	DEWAS	134.584
Madhya Pradesh	DHAR	119.608
Madhya Pradesh	GWALIOR	121.642
Madhya Pradesh	HARDA	133.728
Madhya Pradesh	HOSHANGABAD	164.708
Madhya Pradesh	INDORE	102.355
Madhya Pradesh	JABALPUR	110.833
Madhya Pradesh	JHABUA	115.65
Madhya Pradesh	KATNI	128.858
Madhya Pradesh	KHANDWA (EAST NIMAR)	137.382
Madhya Pradesh	KHARGONE	100.412
Madhya Pradesh	MANDSAUR	145.391
Madhya Pradesh	MORENA	122.32
Madhya Pradesh	NEEMUCH	154.167
+-----+-----+-----+		
176 rows in set (0.00 sec)		

Problem 2 :- Write a Pig UDF to filter the districts which have reached 80% of objectives of BPL cards.

Export the results to MySQL using Sqoop.

Pig UDF



```
que2.java
1 import java.io.IOException;
2
3 import org.apache.pig.EvalFunc;
4 import org.apache.pig.FilterFunc;
5 import org.apache.pig.backend.executionengine.ExecException;
6 import org.apache.pig.data.Tuple;
7
8 public class que2 extends FilterFunc{
9
10    public Boolean exec(Tuple input) throws ExecException
11    {
12
13        float a = (float)input.get(0);
14        float b = (float)input.get(1);
15        float percent = (b/a)*100;
16        String p = Float.toString(percent);
17        if(percent >= 80)
18        {
19            return true;
20        }
21        else
22        {
23            return false;
24        }
25    }
}
```

Register '/home/acadgild/Desktop/que2.jar'

```
g = load '/csvfile/part-m-00000' USING PigStorage(',') AS
(State_Name:chararray,District_Name:chararray,Project_Objectives_IHHL_BPL:float,
Project_Objectives_IHHL_APL:float,Project_Objectives_IHHL_TOTAL:float,Project_Objectives_SCW:float,
Project_Objectives_School_Toilets:float,Project_Objectives_Anganwadi_Toilets:float,
Project_Objectives_RSM:float,Project_Objectives_PCT:float,Project_Performance_IHHL_BPL:float,
Project_Performance_IHHL_APL:float,Project_Performance_IHHL_TOTAL:float,Project_Performance_SCW:float,Project_Performance_TOT:float)
```

Big Data and Hadoop Development

```
t_Performance_School_Toilets:float,Project_Performance_Anganwadi_Toilets:flo  
at,Project_Performance_RSM:float,Project_Performance_PC:float);
```

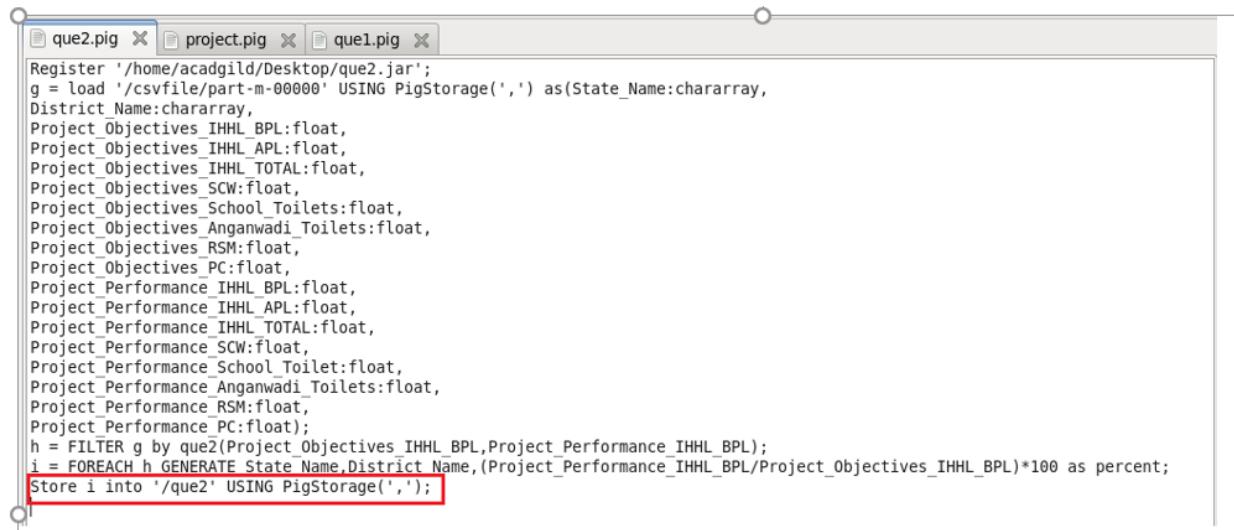
h = Filter G by

```
que2(Project_Objectives_IHHL_BPL,Project_Performance_IHHL_BPL)
```

I = FOREACH H GENERATE

```
State_Name,District_Name,(Project_Performance_IHHL_BPL/Project_Objectives_IHHL_BPL)*100 as percent:
```

```
Store I into '/que2' USING PigStorage(',');
```



The screenshot shows a code editor window with three tabs: 'que2.pig', 'project.pig', and 'que1.pig'. The 'que2.pig' tab is active and contains the following Pig Latin script:

```
Register '/home/acadgild/Desktop/que2.jar';
g = load '/csvfile/part-m-00000' USING PigStorage(',') as (State_Name:chararray,
District_Name:chararray,
Project_Objectives_IHHL_BPL:float,
Project_Objectives_IHHL_APL:float,
Project_Objectives_IHHL_TOTAL:float,
Project_Objectives_SCW:float,
Project_Objectives_School_Toilets:float,
Project_Objectives_Anganwadi_Toilets:float,
Project_Objectives_RSM:float,
Project_Objectives_PC:float,
Project_Performance_IHHL_BPL:float,
Project_Performance_IHHL_APL:float,
Project_Performance_IHHL_TOTAL:float,
Project_Performance_SCW:float,
Project_Performance_School_Toilet:float,
Project_Performance_Anganwadi_Toilets:float,
Project_Performance_RSM:float,
Project_Performance_PC:float);
h = FILTER g by que2(Project_Objectives_IHHL_BPL,Project_Performance_IHHL_BPL);
i = FOREACH h GENERATE State_Name,District_Name,(Project_Performance_IHHL_BPL/Project_Objectives_IHHL_BPL)*100 as percent;
Store i into '/que2' USING PigStorage(',');
```

Big Data and Hadoop Development

Success!

Job Stats (time in seconds):
JobId Maps Reduces MaxMapTime MinMapTime AvgMapTime MedianMapTime MaxReduceTime MinReduceTime AvgRe
duceTime MedianReducetime Alias Feature Outputs
job_1495685485575_0008 1 0 3 3 3 3 0 0 0 0 g,h,i MAP_ONLY h
dfs://localhost:9000/tmp/temp862067766/tmp-617622343,

Input(s):
Successfully read 607 records (55504 bytes) from: "/csvfile/part-m-00000"

Output(s):
Successfully stored 349 records (11859 bytes) in: "hdfs://localhost:9000/tmp/temp862067766/tmp-617622343"

Counters:
Total records written : 349
Total bytes written : 11859
Spillable Memory Manager spill count : 0
Total bags proactively spilled: 0
Total records proactively spilled: 0

Job DAG:
[acdgild@localhost ~]\$ hadoop fs -cat /que2/part-m-00000

[acdgild@localhost ~]\$ hadoop fs -cat /que2/part-m-00000

Big Data and Hadoop Development

```
ccss : 1  
(Andhra Pradesh,ANANTAPUR,100.89262)  
(Andhra Pradesh,CHITTOOR,90.98882)  
(Andhra Pradesh,CUDDAPAH,95.282)  
(Andhra Pradesh,EAST GODAVARI,93.80157)  
(Andhra Pradesh,KARIMNAGAR,101.14053)  
(Andhra Pradesh,KHAMMAM,103.45515)  
(Andhra Pradesh,KRISHNA,96.65853)  
(Andhra Pradesh,KURNool,84.38972)  
(Andhra Pradesh,MEDAK,99.63046)  
(Andhra Pradesh,NALGONDA,104.53599)  
(Andhra Pradesh,NIZAMABAD,100.0)  
(Andhra Pradesh,RANGAREDDI,82.04901)  
(Andhra Pradesh,WARANGAL,108.923874)  
(Andhra Pradesh,WEST GODAVARI,92.797844)  
(Arunachal Pradesh,DIBANG VALLEY,100.2765)  
(Arunachal Pradesh,LOHIT,95.56818)  
(Arunachal Pradesh,TIRAP,100.0)  
(Assam,BAGSHA,85.767296)  
(Assam,CACHAR,84.277626)  
(Assam,DIBRUGARH,90.088394)  
(Assam,GOALPARA,85.672356)  
(Assam,GOLAGHAT,97.79542)  
(Assam,HAILAKANDI,100.0)  
(Assam,JORHAT,80.98663)  
(Assam,KAMRUP,98.76435)  
(Assam,KARIMGANJ,95.95908)  
(Assam,KOKRAJHAR,89.4601)  
(Assam,LAKHIMPUR,83.06156)  
(Assam,MARIGAON,92.95705)  
(Assam,NAGAON,94.00146)  
(Assam,SIBSAGAR,85.389496)  
(Assam,SONITPUR,84.34126)  
(Assam,TINSUKIA,85.509056)  
(Bihar,BEGUSARAI,87.280495)  
(Bihar,MADHUBANI,100.0)  
(Bihar,MUZAFFARPUR,96.49652)  
(Bihar,SAHARSA,81.86909)  
(Bihar,VAISHALI,103.09447)
```

acadgild@localhost:~

Big Data and Hadoop Development

```
(Uttar Pradesh,MEERUT,99.38465)
(Uttar Pradesh,MIRZAPUR,100.861595)
(Uttar Pradesh,MORADABAD,100.0)
(Uttar Pradesh,MUZAFFARNAGAR,100.0)
(Uttar Pradesh,PTLIBHIT,100.0)
(Uttar Pradesh,PRATAPGARH,101.52014)
(Uttar Pradesh,RAE BARELI,100.06516)
(Uttar Pradesh,RAMPUR,91.2306)
(Uttar Pradesh,SAHARANPUR,100.258804)
(Uttar Pradesh,SANT RAVIDAS NAGAR( BHADOHI ),93.05768)
(Uttar Pradesh,SHAHZAHANPUR,100.161316)
(Uttar Pradesh,SHRAVASTI,94.145966)
(Uttar Pradesh,SIDDHARTHNAGAR,89.25478)
(Uttar Pradesh,SITAPUR,89.57219)
(Uttar Pradesh,SONBHADRA,100.0)
(Uttar Pradesh,SULTANPUR,100.0)
(Uttar Pradesh,UNNAO,97.400246)
(Uttar Pradesh,VARANASI,97.17479)
(Uttarakhand,BAGESHWAR,83.270386)
(Uttarakhand,CHAMOLI,95.93325)
(Uttarakhand,DEHRADUN,85.25207)
(Uttarakhand,HARIDWAR,89.85412)
(Uttarakhand,NAINITAL,126.02347)
(Uttarakhand,PITHORAGARH,84.15714)
(Uttarakhand,RUDRAPRAYAG,105.01981)
(Uttarakhand,TEHRI GARHWAL,83.905174)
(Uttarakhand,UDHAM SINGH NAGAR,95.37627)
(Uttarakhand,UTTARKASHI,90.54241)
(West Bengal,BARDHAMAN,85.9808)
(West Bengal,DAKSHIN DINAJPUR,100.8389)
(West Bengal,HOOGHLY,99.27945)
(West Bengal,HOWRAH,99.27974)
(West Bengal,JALPAIGURI,90.547165)
(West Bengal,MIDNAPUR EAST,134.4108)
(West Bengal,MIDNAPUR WEST,117.03546)
(West Bengal,NADIA,92.72157)
(West Bengal,NORTH 24 PARAGANAS,99.03116)
(West Bengal,SOUTH 24 PARAGANAS,94.43306)
```

Exporting the results of ques2 in mysql using sqoop.

Table que2 is created in Mysql.

Big Data and Hadoop Development

```
mysql> use acadgild;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> create table que2(state_name varchar(100),district_name varchar(100),percent float);
Query OK, 0 rows affected (0.02 sec)

mysql> describe que2;
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| state_name | varchar(100) | YES | | NULL | |
| district_name | varchar(100) | YES | | NULL | |
| percent | float | YES | | NULL | |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

The following sqoop command is used to export the result records of que2 to Mysql.

```
[acadgild@localhost ~]$ sqoop export --connect jdbc:mysql://localhost/acadgild --username root --password acadgild --table que2 --export-dir /que2/
Warning: /home/acadgild/sqoop-1.4.6-bin_hadoop-2.0.4-alpha/../.hcatalog does not exist! HCatalog jobs will fail.
Please set $HCAT_HOME to the root of your HCatalog installation.
Warning: /home/acadgild/sqoop-1.4.6-bin_hadoop-2.0.4-alpha/../.accumulo does not exist! Accumulo imports will fail.
Please set $ACCUMULO_HOME to the root of your Accumulo installation.
Warning: /home/acadgild/sqoop-1.4.6-bin_hadoop-2.0.4-alpha/../.zookeeper does not exist! Accumulo imports will fail.
Please set $ZOOKEEPER_HOME to the root of your Zookeeper installation.
```

Big Data and Hadoop Development

```
File System Counters
  FILE: Number of bytes read=0
  FILE: Number of bytes written=545272
  FILE: Number of read operations=0
  FILE: Number of large read operations=0
  FILE: Number of write operations=0
  HDFS: Number of bytes read=23021
  HDFS: Number of bytes written=0
  HDFS: Number of read operations=19
  HDFS: Number of large read operations=0
  HDFS: Number of write operations=0

Job Counters
  Launched map tasks=4
  Data-local map tasks=4
  Total time spent by all maps in occupied slots (ms)=60102
  Total time spent by all reduces in occupied slots (ms)=0
  Total time spent by all map tasks (ms)=60102
  Total vcore-seconds taken by all map tasks=60102
  Total megabyte-seconds taken by all map tasks=61544448

Map-Reduce Framework
  Map input records=349
  Map output records=349
  Input split bytes=536
  Spilled Records=0
  Failed Shuffles=0
  Merged Map outputs=0
  GC time elapsed (ms)=668
  CPU time spent (ms)=2390
  Physical memory (bytes) snapshot=271040512
  Virtual memory (bytes) snapshot=1293041664
  Total committed heap usage (bytes)=65273856

File Input Format Counters
  Bytes Read=0
File Output Format Counters
  Bytes Written=0
```

Total 349 Records exported successfully

Displaying the records in Mysql table.

Big Data and Hadoop Development

```
mysql> select * from que2;
```

state_name	district_name	percent
Uttar Pradesh	BANDA	92.4382
Uttar Pradesh	BARABANKI	101.396
Uttar Pradesh	BAREILLY	100
Uttar Pradesh	BASTI	81.1466
Uttar Pradesh	BIJNOR	100
Uttar Pradesh	BUDAUN	100
Uttar Pradesh	BULANDSHAHAR	110.77
Uttar Pradesh	CHANDAULI	104.668
Uttar Pradesh	CHITRAKOOT	112
Uttar Pradesh	DEORIA	95.0321
Uttar Pradesh	ETAH	111.513
Uttar Pradesh	ETAWAH	100
Uttar Pradesh	FAIZABAD	98.3188
Uttar Pradesh	FARRUKHABAD	100
Uttar Pradesh	FATEHPUR	95.7352
Uttar Pradesh	FIROZABAD	100
Uttar Pradesh	GAUTAM BUDDHA NAGAR	98.1337
Uttar Pradesh	GHAZIABAD	100
Uttar Pradesh	GHAZIPUR	99.1362
Uttar Pradesh	GONDA	86.8813
Uttar Pradesh	GORAKHPUR	99.9891
Uttar Pradesh	HAMIRPUR	84.0198
Uttar Pradesh	HARDOI	100
Uttar Pradesh	JALAUN	89.106
Uttar Pradesh	JAUNPUR	100.37
Uttar Pradesh	JHANSI	100.498
Uttar Pradesh	JYOTIBA PHULE NAGAR	100
Uttar Pradesh	KANNAUJ	100.117
Uttar Pradesh	KANPUR DEHAT	95.8658
Uttar Pradesh	KANPUR NAGAR	93.7124
Uttar Pradesh	KAUSHAMBI	96.8289
Uttar Pradesh	KUSHINAGAR	82.2261
Uttar Pradesh	LAKHIMPUR KHERI	131.153
Uttar Pradesh	LALITPUR	98.8225
Uttar Pradesh	LUCKNOW	100

Big Data and Hadoop Development

Uttar Pradesh	LUCKNOW	100
Uttar Pradesh	MAHAMAYA NAGAR(HATHRAS)	100.493
Uttar Pradesh	MAHARAJGANJ	100
Uttar Pradesh	MAHOBIA	100
Uttar Pradesh	MAINPURI	91.8595
Uttar Pradesh	MATHURA	100.42
Uttar Pradesh	MAU	81.1694
Uttar Pradesh	MEERUT	99.3847
Uttar Pradesh	MIRZAPUR	100.862
Uttar Pradesh	MORADABAD	100
Uttar Pradesh	MUZAFFARNAGAR	100
Uttar Pradesh	PILIBHIT	100
Uttar Pradesh	PRATAPGARH	101.52
Uttar Pradesh	RAE BARELI	100.065
Uttar Pradesh	RAMPUR	91.2306
Uttar Pradesh	SAHARANPUR	100.259
Uttar Pradesh	SANT RAVIDAS NAGAR(BHADOHI)	93.0577
Uttar Pradesh	SHAHJAHANPUR	100.161
Uttar Pradesh	SHRAVASTI	94.146
Uttar Pradesh	SIDDHARTHNAGAR	89.2548
Uttar Pradesh	SITAPUR	89.5722
Uttar Pradesh	SONBHADRA	100
Uttar Pradesh	SULTANPUR	100
Uttar Pradesh	UNNAO	97.4002
Uttar Pradesh	VARANASI	97.1748
Uttarakhand	BAGESHWAR	83.2704
Uttarakhand	CHAMOLI	95.9333
Uttarakhand	DEHRADUN	85.2521
Uttarakhand	HARIDWAR	89.8541
Uttarakhand	NAINITAL	126.023
Uttarakhand	PITHORAGARH	84.1571
Uttarakhand	RUDRAPRAYAG	105.019
Uttarakhand	TEHRI GARHWAL	83.9052
Uttarakhand	UDHAM SINGH NAGAR	95.3763
Uttarakhand	UTTARKASHI	90.5424
West Bengal	BARDHAMAN	85.9808
West Bengal	DAKSHIN DINAJPUR	100.839
West Bengal	HOOGHLY	99.2794
West Bengal	HOWRAH	99.2797

Big Data and Hadoop Development

West Bengal	HOWRAH	99.2797
West Bengal	JALPAIGURI	90.5472
West Bengal	MIDNAPUR EAST	134.411
West Bengal	MIDNAPUR WEST	117.035
West Bengal	NADIA	92.7216
West Bengal	NORTH 24 PARAGANAS	99.0312
West Bengal	SOUTH 24 PARAGANAS	94.4331
Himachal Pradesh	LAHAUL & SPITI	100
Himachal Pradesh	MANDI	100.003
Himachal Pradesh	SHIMLA	100
Himachal Pradesh	SIRMAUR	99.4038
Himachal Pradesh	SOLAN	100
Himachal Pradesh	UNA	100
Jammu & Kashmir	ANANTNAG	82.0632
Jammu & Kashmir	LEH (LADAKH)	86.9622
Jharkhand	DEOGHAR	100
Jharkhand	DUMKA	85.328
Jharkhand	LATEHAR	83.4495
Jharkhand	LOHARDAGA	100
Jharkhand	PAKUR	87.3495
Jharkhand	PURBI SINGHBHUM	130.63
Karnataka	BAGALKOT	91.908
Karnataka	BANGALORE RURAL	139.545
Karnataka	CHICKMAGALUR	95.9966
Karnataka	CHITRADURGA	97.5928
Karnataka	DHARWAD	92.9976
Karnataka	GADAG	84.1802
Karnataka	HASSAN	100
Karnataka	KODAGU	99.485
Karnataka	KOLAR	198.56
Karnataka	KOPPAL	87.524
Karnataka	MANDYA	90.6749
Karnataka	MANGALORE(DAKSHINA KANNADA)	100
Karnataka	RAMANAGARA	89.0558
Karnataka	SHIMOGA	100.571
Karnataka	UDUPI	100
Kerala	ALAPPUZHA	100
Kerala	ERNAKULAM	102.438
Kerala	IDUKKI	103.488

Big Data and Hadoop Development

Kerala	ERNAKULAM	102.438
Kerala	IDUKKI	103.488
Kerala	KANNUR	110.278
Kerala	KASARGOD	103.841
Kerala	KOLLAM	100
Kerala	KOTTAYAM	100
Kerala	KOZHIKODE	100
Kerala	MALAPPURAM	102.167
Kerala	PALAKKAD	100
Kerala	PATHANAMTHITTA	100
Kerala	THIRUVANANTHAPURAM	106.205
Kerala	THRISUR	104.824
Kerala	WAYANAD	100
Madhya Pradesh	ALIRAJPUR	138.577
Madhya Pradesh	ANUPPUR	139.684
Madhya Pradesh	BARWANI	111.848
Madhya Pradesh	BETUL	100.601
Madhya Pradesh	BHOPAL	156.822
Madhya Pradesh	BURHANPUR	105.586
Madhya Pradesh	DATIA	153.255
Madhya Pradesh	DEWAS	134.584
Madhya Pradesh	DHAR	119.608
Madhya Pradesh	DINDORI	94.0017
Madhya Pradesh	GUNA	80.0468
Madhya Pradesh	GWALIOR	121.642
Madhya Pradesh	HARDA	133.728
Madhya Pradesh	HOSHANGABAD	164.708
Madhya Pradesh	INDORE	102.355
Madhya Pradesh	JABALPUR	110.833
Madhya Pradesh	JHABUA	115.65
Madhya Pradesh	KATNI	128.858
Madhya Pradesh	KHANDWA(EAST NIMAR)	137.382
Madhya Pradesh	KHARGONE	100.412
Madhya Pradesh	MANDLA	82.3984
Madhya Pradesh	MANDSAUR	145.391
Madhya Pradesh	MORENA	122.32
Madhya Pradesh	NARSINGHPUR	98.3156
Madhya Pradesh	NEEMUCH	154.167
Madhya Pradesh	RAISEN	115.4

Big Data and Hadoop Development

Madhya Pradesh	NEEMUCH	154.167
Madhya Pradesh	RAISEN	115.4
Madhya Pradesh	RAJGARH	122.283
Madhya Pradesh	RATLAM	125.814
Madhya Pradesh	REWA	121.395
Madhya Pradesh	SEHORE	224.157
Madhya Pradesh	SEONI	88.635
Madhya Pradesh	SHAHDOL	102.104
Madhya Pradesh	SHAJAPUR	114.96
Madhya Pradesh	SHEOPUR	159.111
Madhya Pradesh	SINGRAULI	99.315
Madhya Pradesh	UJJAIN	113.473
Madhya Pradesh	UMARIA	134.171
Madhya Pradesh	VIDISHA	85.6183
Maharashtra	AHMEDNAGAR	98.4342
Maharashtra	BHANDARA	87.5302
Maharashtra	DHULE	80.5325
Andhra Pradesh	ANANTAPUR	100.893
Andhra Pradesh	CHITTOOR	90.9888
Andhra Pradesh	CUDDAPAH	95.282
Andhra Pradesh	EAST GODAVARI	93.8016
Andhra Pradesh	KARIMNAGAR	101.141
Andhra Pradesh	KHAMMAM	103.455
Andhra Pradesh	KRISHNA	90.6585
Andhra Pradesh	KURNOOL	84.3897
Andhra Pradesh	MEDAK	99.6305
Andhra Pradesh	NALGONDA	104.536
Andhra Pradesh	NIZAMABAD	100
Andhra Pradesh	RANGAREDDI	82.049
Andhra Pradesh	WARANGAL	108.924
Andhra Pradesh	WEST GODAVARI	92.7978
Arunachal Pradesh	DIBANG VALLEY	100.276
Arunachal Pradesh	LOHIT	95.5682
Arunachal Pradesh	TIRAP	100
Assam	BAGSHA	85.7673
Assam	CACHAR	84.2776
Assam	DIBRUGARH	90.0884
Assam	GOALPARA	85.6724
Assam	GOLAGHAT	97.7954

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Assam	GOLAGHAT	97.7954
Assam	HAILAKANDI	100
Assam	JORHAT	80.9866
Assam	KAMRUP	98.7644
Assam	KARIMGANJ	95.9591
Assam	KOKRAJHAR	89.4601
Assam	LAKHIMPUR	83.0616
Assam	MARIGAON	92.957
Assam	NAGAON	94.0015
Assam	SIBSAGAR	85.3895
Assam	SONITPUR	84.3413
Assam	TINSUKIA	85.5091
Bihar	BEGUSARAI	87.2805
Bihar	MADHUBANI	100
Bihar	MUZAFFARPUR	96.4965
Bihar	SAHARSA	81.8691
Bihar	VAISHALI	103.094
Chhattisgarh	DHAMTARI	83.6212
Chhattisgarh	JASHPUR	98.9245
Chhattisgarh	KANKER	81.135
Chhattisgarh	KORBA	126.222
Chhattisgarh	KORIYA	80.071
Chhattisgarh	SURGUJA	82.9458
Goa	NORTH GOA	100
Gujarat	AHMEDABAD	100
Gujarat	AMRELI	91.428
Gujarat	ANAND	96.9108
Gujarat	BANAS KANTHA	99.3014
Gujarat	BHARUCH	95.8401
Gujarat	BHAVNAGAR	100.824
Gujarat	DAHOD	97.7685
Gujarat	DANGS	100
Gujarat	GANDHINAGAR	81.6341
Gujarat	JAMNAGAR	105.154
Gujarat	JUNAGADH	98.9902
Gujarat	KACHCHH	82.8603
Gujarat	KHEDA	99.0614
Gujarat	MAHESANA	100.714
Gujarat	NARMADA	96.9249

acadgild@localhost:~

Big Data and Hadoop Development

Gujarat	MAHESANA	100.714
Gujarat	NARMADA	96.9249
Gujarat	NAVSARI	100
Gujarat	PANCH MAHALS	98.0138
Gujarat	PATAN	102.147
Gujarat	PORBANDAR	100
Gujarat	RAJKOT	100.867
Gujarat	SABAR KANTHA	99.8712
Gujarat	SURAT	100
Gujarat	SURENDRANAGAR	83.9947
Gujarat	VADODARA	91.6543
Gujarat	VALSAD	127.969
Haryana	AMBALA	90.3726
Haryana	BHIWANI	100.613
Haryana	FARIDABAD	100
Haryana	FATEHABAD	98.9041
Haryana	GURGAON	140.867
Haryana	HISAR	100
Haryana	JHAJJAR	100
Haryana	JIND	98.3431
Haryana	KAITHAL	98.7043
Haryana	KARNAL	100.091
Haryana	KURUKSHETRA	100.271
Haryana	MAHENDRAGARH	100
Haryana	MEWAT	90.688
Haryana	PANCHKULA	100
Haryana	PANIPAT	100
Haryana	REWARI	88.4933
Haryana	ROHTAK	100
Haryana	SIRSA	100
Haryana	SONIPAT	101.651
Haryana	YAMUNANAGAR	98.8123
Himachal Pradesh	BILASPUR	109.614
Himachal Pradesh	CHAMBA	131.495
Himachal Pradesh	HAMIRPUR	100
Himachal Pradesh	KANGRA	137.378
Himachal Pradesh	KINNAUR	100
Himachal Pradesh	KULLU	100
Maharashtra	GADCHIROLI	100

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Maharashtra	GADCHIROLI	100
Maharashtra	GONDIA	94.4182
Maharashtra	HINGOLI	91.2322
Maharashtra	JALNA	97.2189
Maharashtra	KOLHAPUR	80.2574
Maharashtra	NAGPUR	88.3415
Maharashtra	OSMANABAD	99.9779
Maharashtra	PARBHANI	87.1717
Maharashtra	PUNE	97.7041
Maharashtra	RATNAGIRI	106.744
Maharashtra	SANGLI	82.9894
Maharashtra	SATARA	85.8256
Maharashtra	SINDHUDURG	100
Maharashtra	THANE	95.5074
Maharashtra	WARDHA	92.7833
Manipur	BISHNUPUR	87.0639
Manipur	IMPHAL EAST	95.1551
Manipur	TAMENGLONG	88.5351
Meghalaya	RI BHOI	84.4249
Meghalaya	SOUTH GARO HILLS	90.5283
Meghalaya	WEST GARO HILLS	100
Mizoram	CHAMPHAI	100
Mizoram	KOLASIB	98.0867
Mizoram	LAWNGTLAI	100
Mizoram	LUNGLEI	89.362
Mizoram	MAMIT	97.7102
Mizoram	SAIHA	88.6571
Mizoram	SERCHHIP	88.9024
Nagaland	KOHIMA	93.6392
Nagaland	MOKOKCHUNG	96.9273
Nagaland	PHEK	86.9651
Orissa	BALESWAR	90.7402
Orissa	JAGATSINGHAPUR	95.7636
Punjab	BARNALA	103.757
Punjab	FATEHGARH SAHIB	105.835
Punjab	HOSHIARPUR	171.832
Punjab	JALANDHAR	98.8333
Punjab	KAPURTHALA	95.8627
Punjab	LUDHIANA	103.298

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Punjab	LUDHIANA	103.298
Punjab	MANSA	93.592
Punjab	NAWANSIHR	159.233
Punjab	S.A.S Nagar	100.424
Rajasthan	AJMER	89.486
Rajasthan	CHURU	94.6775
Rajasthan	DUNGARPUR	82.7233
Rajasthan	GANGANAGAR	99.0238
Rajasthan	HANUMANGARH	100
Rajasthan	JAISALMER	92.8388
Rajasthan	NAGAUR	98.6157
Rajasthan	SIKAR	83.4434
Sikkim	EAST SIKKIM	111.377
Sikkim	NORTH SIKKIM	109.703
Sikkim	SOUTH SIKKIM	138.751
Sikkim	WEST SIKKIM	100.755
Tamil Nadu	COIMBATORE	91.9013
Tamil Nadu	CUDDALORE	98.4481
Tamil Nadu	DHARMAPURI	100.032
Tamil Nadu	DINDIGUL	86.3203
Tamil Nadu	ERODE	100
Tamil Nadu	KANCHIPURAM	104.839
Tamil Nadu	KANYAKUMARI(NAGERCOIL)	111.267
Tamil Nadu	KARUR	100
Tamil Nadu	MADURAI	83.0213
Tamil Nadu	NAMAKKAL	100
Tamil Nadu	NILGIRIS(UDHAGAMANDALAM)	80.3326
Tamil Nadu	PERAMBALUR	96.4005
Tamil Nadu	PUDUKKOTTAI	112.103
Tamil Nadu	RAMANATHAPURAM	149.246
Tamil Nadu	SALEM	84.025
Tamil Nadu	SIVAGANGA	94.3665
Tamil Nadu	THENI	97.5968
Tamil Nadu	THOOTHUKUDI	91.5078
Tamil Nadu	TIRUCHIRAPPALLI	100
Tamil Nadu	TIRUNELVELI	110.782
Tamil Nadu	TIRUVANNAMALAI	100
Tamil Nadu	TIRUVARUR	108.648
Tamil Nadu	VELLORE	96.2776

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Tamil Nadu	CUDDALORE	98.4481
Tamil Nadu	DHARMAPURI	100.032
Tamil Nadu	DINDIGUL	86.3203
Tamil Nadu	ERODE	100
Tamil Nadu	KANCHIPURAM	104.839
Tamil Nadu	KANYAKUMARI(NAGERCOIL)	111.267
Tamil Nadu	KARUR	100
Tamil Nadu	MADURAI	83.0213
Tamil Nadu	NAMAKKAL	100
Tamil Nadu	NILGIRIS(UDHAGAMANDALAM)	80.3326
Tamil Nadu	PERAMBALUR	96.4005
Tamil Nadu	PUDUKKOTTAI	112.103
Tamil Nadu	RAMANATHAPURAM	149.246
Tamil Nadu	SALEM	84.025
Tamil Nadu	SIVAGANGA	94.3665
Tamil Nadu	THENI	97.5968
Tamil Nadu	THoothukudi	91.5078
Tamil Nadu	TIRUCHIRAPPALLI	100
Tamil Nadu	TIRUNELVELI	110.782
Tamil Nadu	TIRUVANNAMALAI	100
Tamil Nadu	TIRUVARUR	108.648
Tamil Nadu	VELLORE	96.2776
Tamil Nadu	VIRUDHUNAGAR	87.6451
Tripura	DHALAI	100
Tripura	NORTH TRIPURA	94.0234
Tripura	SOUTH TRIPURA	100
Tripura	WEST TRIPURA	100
Uttar Pradesh	AGRA	101.109
Uttar Pradesh	ALIGARH	92.1
Uttar Pradesh	ALLAHABAD	107.593
Uttar Pradesh	AMBEDKAR NAGAR	100
Uttar Pradesh	AZAMGARH	86.3251
Uttar Pradesh	BAGPAT	85.086
Uttar Pradesh	BALLIA	97.2767
Uttar Pradesh	BALRAMPUR	100

349 rows in set (0.00 sec)