

statement 1: Find out the districts who achieved 100 percent objective in BPL cards

Export the results to mysql using sqoop

Pig Script to calculate 100% Objective

File Name: StateObj.pig

```
REGISTER /usr/local/pig/lib/piggybank.jar;
```

```
DEFINE XPath org.apache.pig.piggybank.evaluation.xml.XPath();
```

```
Data = LOAD 'statewisedevelopment/state.xml' using  
org.apache.pig.piggybank.storage.XMLLoader('row') as (x:chararray);
```

```
StateDet = FOREACH Data GENERATE XPath(x, 'row/State_Name') AS statename, XPath(x,  
'row/District_Name') AS disname, XPath(x, 'row/Project_Objectives_IHHL_BPL') AS BPL, XPath(x,  
'row/Project_Objectives_IHHL_TOTAL') AS total ;
```

```
ObjFiltered = FILTER StateDet BY BPL == total;
```

```
STORE ObjFiltered INTO '/home/acadgild/StateObj' USING PigStorage(',');
```

Files Present after executing the script using :

```
[acadgild@localhost ~]$ pig -x local Stateobj.pig
```

```
[acadgild@localhost ~]$ ls /home/acadgild/StateObj
```

```
part-m-00000 _SUCCESS
```

Output Content

```
[acadgild@localhost ~]$ cat /home/acadgild/StateObj/p*
```

```
Arunachal Pradesh,ANJAW,3232,3232
```

```
Arunachal Pradesh,DIBANG VALLEY,1085,1085
```

Arunachal Pradesh,KURUNG KUMEY,22036,22036

Arunachal Pradesh,LOHIT,8800,8800

Arunachal Pradesh,WEST SIANG,11472,11472

Bihar,BANKA,82439,82439

D & N Haveli,DADRA AND NAGAR HAVELI,2480,2480

Goa,NORTH GOA,15000,15000

Jammu & Kashmir,KARGIL,8475,8475

Jammu & Kashmir,KISHTWAR,22318,22318

Jammu & Kashmir,LEH (LADAKH),6090,6090

Jammu & Kashmir,REASI,21500,21500

Jammu & Kashmir,SAMBA,9849,9849

Jammu & Kashmir,SHOPIAN,10196,10196

Copy the output to HDFS

```
[acadgild@localhost ~]$ hadoop fs -put StateObj /user/acadgild
```

Open another terminal:Terminal 2 and run all the daemons using

1) start-all.sh

2) Make sure the daemons are up using

```
[acadgild@localhost ~]$ jps
```

16884 Jps

3382 SecondaryNameNode

3560 ResourceManager

3118 NameNode

3663 NodeManager

3215 DataNode

3) Run MySQL using the following commands

3.1) `sudo service mysqld start`

3.2) `mysql -u root`

Create a new Database:

```
mysql>create database state;
```

```
mysql>use state;
```

Create a table similar to the structure of the output file contents:

```
mysql>create table BPLObjectivesMet (State varchar(20), district varchar(50), BPL int, total int);
```

```
mysql>show tables;
```

```
+-----+
```

```
| Tables_in_state |
```

```
+-----+
```

```
| BPLObjectivesMet |
```

```
| state80percent |
```

```
+-----+
```

2 rows in set (0.00 sec)

In Terminal1, run the sqoop command to Export the Pig Script analysis from HDFS to MySQL:

```
sqoop export --connect jdbc:mysql://localhost/state --username 'root' -P --table BPLObjectivesMet --  
export-dir '/user/acadgild/StateObj/part-m-00000' --input-fields-terminated-by ',' -m 1
```

In Terminal2, check for if the Tables have been populated with data:

```
mysql> select * from BPLObjectivesMet;
```

```
+-----+-----+-----+-----+
```

```
| State      | district          | BPL | total |
```

+-----+-----+-----+

| Arunachal Pradesh | ANJAW | 3232 | 3232 |

| Arunachal Pradesh | DIBANG VALLEY | 1085 | 1085 |

| Arunachal Pradesh | KURUNG KUMEY | 22036 | 22036 |

| Arunachal Pradesh | LOHIT | 8800 | 8800 |

| Arunachal Pradesh | WEST SIANG | 11472 | 11472 |

| Bihar | BANKA | 82439 | 82439 |

| D & N Haveli | DADRA AND NAGAR HAVELI | 2480 | 2480 |

| Goa | NORTH GOA | 15000 | 15000 |

| Jammu & Kashmir | KARGIL | 8475 | 8475 |

| Jammu & Kashmir | KISHTWAR | 22318 | 22318 |

| Jammu & Kashmir | LEH (LADAKH) | 6090 | 6090 |

| Jammu & Kashmir | REASI | 21500 | 21500 |

| Jammu & Kashmir | SAMBA | 9849 | 9849 |

Jammu & Kashmir	SHOPIAN	10196	10196	
-----------------	---------	-------	-------	--

+	-----	+	-----	+	-----	+	-----	+
---	-------	---	-------	---	-------	---	-------	---

14 rows in set (0.05 sec)