

## ETL ASSIGNMENT TASKS:

1. Ingest data from Amazon RDS to HDFS using Sqoop.

```
sqoop import --connect jdbc:mysql://upgradawsrds.cpclxrkdvmz.us-east-1.rds.amazonaws.com/indiaahs2012_13 --username upgraduser --password upgraduser --table Key_indicator_districtwise
```

2. Command to see the list of imported data

```
[cloudera@quickstart ~]$ hdfs dfs -ls  
[cloudera@quickstart ~]$ hdfs dfs -ls Key_indicator_districtwise
```

3. Create an external table in HIVE for the ingested data containing all the columns as given in this document. Ingest the data from HDFS to the HIVE table. Verify that the ingestion is successfully accomplished.

```
Create External Table key_indicative_ext (  
ID int,  
State_Name varchar(100),  
State_District_Name varchar(100),  
AA_Sample_Units_Total double,  
AA_Sample_Units_Rural double,  
AA_Sample_Units_Urban double,  
AA_Households_Total double,  
AA_Households_Rural double,  
AA_Households_Urban double,  
AA_Population_Total double,  
AA_Population_Rural double,  
AA_Population_Urban double,  
AA_Ever_Married_Women_Aged_15_49_Years_Total double,  
AA_Ever_Married_Women_Aged_15_49_Years_Rural double,  
AA_Ever_Married_Women_Aged_15_49_Years_Urban double,  
AA_Currently_Married_Women_Aged_15_49_Years_Total double,  
AA_Currently_Married_Women_Aged_15_49_Years_Rural double,  
AA_Currently_Married_Women_Aged_15_49_Years_Urban double,  
AA_Children_12_23_Months_Total double,  
AA_Children_12_23_Months_Rural double,  
AA_Children_12_23_Months_Urban double,  
BB_Average_Household_Size_Sc_Total double,  
BB_Average_Household_Size_Sc_Rural double,  
BB_Average_Household_Size_Sc_Urban double,  
BB_Average_Household_Size_St_Total double,  
BB_Average_Household_Size_St_Rural double,  
BB_Average_Household_Size_St_Urban double,  
BB_Average_Household_Size_All_Total double,  
BB_Average_Household_Size_All_Rural double,  
BB_Average_Household_Size_All_Urban double,  
BB_Population_Below_Age_15_Years_Total double,  
BB_Population_Below_Age_15_Years_Rural double,  
BB_Population_Below_Age_15_Years_Urban double,  
BB_Dependency_Ratio_Total double,  
BB_Dependency_Ratio_Rural double,  
BB_Dependency_Ratio_Urban double,  
BB_Currently_Married_Illiterate_Women_Aged_15_49_Years_Total double,  
BB_Currently_Married_Illiterate_Women_Aged_15_49_Years_Rural double,  
BB_Currently_Married_Illiterate_Women_Aged_15_49_Years_Urban double,  
CC_Sex_Ratio_At_Birth_Total double,  
CC_Sex_Ratio_At_Birth_Rural double,  
CC_Sex_Ratio_At_Birth_Urban double,
```

CC\_Sex\_Ratio\_0\_4\_Years\_Total double,  
CC\_Sex\_Ratio\_0\_4\_Years\_Rural double,  
CC\_Sex\_Ratio\_0\_4\_Years\_Urban double,  
CC\_Sex\_Ratio\_All\_Ages\_Total double,  
CC\_Sex\_Ratio\_All\_Ages\_Rural double,  
CC\_Sex\_Ratio\_All\_Ages\_Urban double,  
DD\_Person\_Total double,  
DD\_Person\_Rural double,  
DD\_Person\_Urban double,  
DD\_Male\_Total double,  
DD\_Male\_Rural double,  
DD\_Male\_Urban double,  
DD\_Female\_Total double,  
DD\_Female\_Rural double,  
DD\_Female\_Urban double,  
EE\_Marriages\_Among\_Females\_Below\_Legal\_Age\_18\_Years\_Total double,  
EE\_Marriages\_Among\_Females\_Below\_Legal\_Age\_18\_Years\_Rural double,  
EE\_Marriages\_Among\_Females\_Below\_Legal\_Age\_18\_Years\_Urban double,  
EE\_Marriages\_Among\_Males\_Below\_Legal\_Age\_21\_Years\_Total double,  
EE\_Marriages\_Among\_Males\_Below\_Legal\_Age\_21\_Years\_Rural double,  
EE\_Marriages\_Among\_Males\_Below\_Legal\_Age\_21\_Years\_Urban double,  
EE\_Married\_Women\_20\_24\_Years\_Married\_Before\_18\_Years\_Total double,  
EE\_Married\_Women\_20\_24\_Years\_Married\_Before\_18\_Years\_Rural double,  
EE\_Married\_Women\_20\_24\_Years\_Married\_Before\_18\_Years\_Urban double,  
EE\_Married\_Men\_25\_29\_Years\_Married\_Before\_21\_Years\_Total double,  
EE\_Married\_Men\_25\_29\_Years\_Married\_Before\_21\_Years\_Rural double,  
EE\_Married\_Men\_25\_29\_Years\_Married\_Before\_21\_Years\_Urban double,  
EE\_Mean\_Age\_At\_Marriage\_Male\_Total double,  
EE\_Mean\_Age\_At\_Marriage\_Male\_Rural double,  
EE\_Mean\_Age\_At\_Marriage\_Male\_Urban double,  
EE\_Mean\_Age\_At\_Marriage\_Female\_Total double,  
EE\_Mean\_Age\_At\_Marriage\_Female\_Rural double,  
EE\_Mean\_Age\_At\_Marriage\_Female\_Urban double,  
FF\_Children\_Attending\_School\_Age\_6\_17\_Years\_Person\_Total double,  
FF\_Children\_Attending\_School\_Age\_6\_17\_Years\_Person\_Rural double,  
FF\_Children\_Attending\_School\_Age\_6\_17\_Years\_Person\_Urban double,  
FF\_Children\_Attending\_School\_Age\_6\_17\_Years\_Male\_Total double,  
FF\_Children\_Attending\_School\_Age\_6\_17\_Years\_Male\_Rural double,  
FF\_Children\_Attending\_School\_Age\_6\_17\_Years\_Male\_Urban double,  
FF\_Children\_Attending\_School\_Age\_6\_17\_Years\_Female\_Total double,  
FF\_Children\_Attending\_School\_Age\_6\_17\_Years\_Female\_Rural double,  
FF\_Children\_Attending\_School\_Age\_6\_17\_Years\_Female\_Urban double,  
FF\_Children\_Attended\_Before\_Drop\_Out\_Age\_6\_17\_Years\_Person\_Total double,  
FF\_Children\_Attended\_Before\_Drop\_Out\_Age\_6\_17\_Years\_Person\_Rural double,  
FF\_Children\_Attended\_Before\_Drop\_Out\_Age\_6\_17\_Years\_Person\_Urban double,  
FF\_Children\_Attended\_Before\_Drop\_Out\_Age\_6\_17\_Years\_Male\_Total double,  
FF\_Children\_Attended\_Before\_Drop\_Out\_Age\_6\_17\_Years\_Male\_Rural double,  
FF\_Children\_Attended\_Before\_Drop\_Out\_Age\_6\_17\_Years\_Male\_Urban double,  
FF\_Children\_Attended\_Before\_Drop\_Out\_Age\_6\_17\_Years\_Female\_Total double,  
FF\_Children\_Attended\_Before\_Drop\_Out\_Age\_6\_17\_Years\_Female\_Rural double,  
FF\_Children\_Attended\_Before\_Drop\_Out\_Age\_6\_17\_Years\_Female\_Urban double,  
GG\_Children\_Aged\_5\_14\_Years\_Engaged\_In\_Work\_Person\_Total double,  
GG\_Children\_Aged\_5\_14\_Years\_Engaged\_In\_Work\_Person\_Rural double,  
GG\_Children\_Aged\_5\_14\_Years\_Engaged\_In\_Work\_Person\_Urban double,  
GG\_Children\_Aged\_5\_14\_Years\_Engaged\_In\_Work\_Male\_Total double,  
GG\_Children\_Aged\_5\_14\_Years\_Engaged\_In\_Work\_Male\_Rural double,  
GG\_Children\_Aged\_5\_14\_Years\_Engaged\_In\_Work\_Male\_Urban double,

GG\_Children\_Aged\_5\_14\_Years\_Engaged\_In\_Work\_Female\_Total double,  
GG\_Children\_Aged\_5\_14\_Years\_Engaged\_In\_Work\_Female\_Rural double,  
GG\_Children\_Aged\_5\_14\_Years\_Engaged\_In\_Work\_Female\_Urban double,  
GG\_Work\_Participation\_Rate\_15\_Years\_And\_Above\_Person\_Total double,  
GG\_Work\_Participation\_Rate\_15\_Years\_And\_Above\_Person\_Rural double,  
GG\_Work\_Participation\_Rate\_15\_Years\_And\_Above\_Person\_Urban double,  
GG\_Work\_Participation\_Rate\_15\_Years\_And\_Above\_Male\_Total double,  
GG\_Work\_Participation\_Rate\_15\_Years\_And\_Above\_Male\_Rural double,  
GG\_Work\_Participation\_Rate\_15\_Years\_And\_Above\_Male\_Urban double,  
GG\_Work\_Participation\_Rate\_15\_Years\_And\_Above\_Female\_Total double,  
GG\_Work\_Participation\_Rate\_15\_Years\_And\_Above\_Female\_Rural double,  
GG\_Work\_Participation\_Rate\_15\_Years\_And\_Above\_Female\_Urban double,  
HH\_Prevalence\_Disability\_Per\_100000\_Population\_Person\_Total double,  
HH\_Prevalence\_Disability\_Per\_100000\_Population\_Person\_Rural double,  
HH\_Prevalence\_Disability\_Per\_100000\_Population\_Person\_Urban double,  
HH\_Prevalence\_Disability\_Per\_100000\_Population\_Male\_Total double,  
HH\_Prevalence\_Disability\_Per\_100000\_Population\_Male\_Rural double,  
HH\_Prevalence\_Disability\_Per\_100000\_Population\_Male\_Urban double,  
HH\_Prevalence\_Disability\_Per\_100000\_Population\_Female\_Total double,  
HH\_Prevalence\_Disability\_Per\_100000\_Population\_Female\_Rural double,  
HH\_Prevalence\_Disability\_Per\_100000\_Population\_Female\_Urban double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Severe\_Person\_Total double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Severe\_Person\_Rural double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Severe\_Person\_Urban double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Severe\_Male\_Total double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Severe\_Male\_Rural double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Severe\_Male\_Urban double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Severe\_Female\_Total double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Severe\_Female\_Rural double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Severe\_Female\_Urban double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Major\_Person\_Total double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Major\_Person\_Rural double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Major\_Person\_Urban double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Major\_Male\_Total double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Major\_Male\_Rural double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Major\_Male\_Urban double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Major\_Female\_Total double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Major\_Female\_Rural double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Major\_Female\_Urban double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Minor\_Person\_Total double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Minor\_Person\_Rural double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Minor\_Person\_Urban double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Minor\_Male\_Total double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Minor\_Male\_Rural double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Minor\_Male\_Urban double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Minor\_Female\_Total double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Minor\_Female\_Rural double,  
II\_Injured\_By\_Type\_Of\_Treatment\_Per\_100000\_Minor\_Female\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Diarrhoea\_Dysentery\_Person\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Diarrhoea\_Dysentery\_Person\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Diarrhoea\_Dysentery\_Person\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Diarrhoea\_Dysentery\_Male\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Diarrhoea\_Dysentery\_Male\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Diarrhoea\_Dysentery\_Male\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Diarrhoea\_Dysentery\_Female\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Diarrhoea\_Dysentery\_Female\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Diarrhoea\_Dysentery\_Female\_Urban double,

JJ\_Acute\_Illness\_Per\_100000\_Respiratory\_Infection\_Person\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Respiratory\_Infection\_Person\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Respiratory\_Infection\_Person\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Respiratory\_Infection\_Male\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Respiratory\_Infection\_Male\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Respiratory\_Infection\_Male\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Respiratory\_Infection\_Female\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Respiratory\_Infection\_Female\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Respiratory\_Infection\_Female\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Fever\_All\_Types\_Person\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Fever\_All\_Types\_Person\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Fever\_All\_Types\_Person\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Fever\_All\_Types\_Male\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Fever\_All\_Types\_Male\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Fever\_All\_Types\_Male\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Fever\_All\_Types\_Female\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Fever\_All\_Types\_Female\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Fever\_All\_Types\_Female\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Any\_Type\_Of\_Acute\_Person\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Any\_Type\_Of\_Acute\_Person\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Any\_Type\_Of\_Acute\_Person\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Any\_Type\_Of\_Acute\_Male\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Any\_Type\_Of\_Acute\_Male\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Any\_Type\_Of\_Acute\_Male\_Urban double,  
JJ\_Acute\_Illness\_Per\_100000\_Any\_Type\_Of\_Acute\_Female\_Total double,  
JJ\_Acute\_Illness\_Per\_100000\_Any\_Type\_Of\_Acute\_Female\_Rural double,  
JJ\_Acute\_Illness\_Per\_100000\_Any\_Type\_Of\_Acute\_Female\_Urban double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Person\_Total double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Person\_Rural double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Person\_Urban double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Male\_Total double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Male\_Rural double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Male\_Urban double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Female\_Total double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Female\_Rural double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Female\_Urban double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Government\_Person\_Total double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Government\_Person\_Rural double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Government\_Person\_Urban double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Government\_Male\_Total double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Government\_Male\_Rural double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Government\_Male\_Urban double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Government\_Female\_Total double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Government\_Female\_Rural double,  
JJ\_Acute\_Illness\_And\_Taking\_Treatment\_Government\_Female\_Urban double,  
KK\_Symptoms\_Of\_Chronic\_Illness\_Per\_100000\_Person\_Total double,  
KK\_Symptoms\_Of\_Chronic\_Illness\_Per\_100000\_Person\_Rural double,  
KK\_Symptoms\_Of\_Chronic\_Illness\_Per\_100000\_Person\_Urban double,  
KK\_Symptoms\_Of\_Chronic\_Illness\_Per\_100000\_Male\_Total double,  
KK\_Symptoms\_Of\_Chronic\_Illness\_Per\_100000\_Male\_Rural double,  
KK\_Symptoms\_Of\_Chronic\_Illness\_Per\_100000\_Male\_Urban double,  
KK\_Symptoms\_Of\_Chronic\_Illness\_Per\_100000\_Female\_Total double,  
KK\_Symptoms\_Of\_Chronic\_Illness\_Per\_100000\_Female\_Rural double,  
KK\_Symptoms\_Of\_Chronic\_Illness\_Per\_100000\_Female\_Urban double,  
KK\_Chronic\_Illness\_And\_Sought\_Medical\_Care\_Person\_Total double,  
KK\_Chronic\_Illness\_And\_Sought\_Medical\_Care\_Person\_Rural double,  
KK\_Chronic\_Illness\_And\_Sought\_Medical\_Care\_Person\_Urban double,

KK\_Chronic\_Illness\_And\_Sought\_Medical\_Care\_Male\_Total double,  
KK\_Chronic\_Illness\_And\_Sought\_Medical\_Care\_Male\_Rural double,  
KK\_Chronic\_Illness\_And\_Sought\_Medical\_Care\_Male\_Urban double,  
KK\_Chronic\_Illness\_And\_Sought\_Medical\_Care\_Female\_Total double,  
KK\_Chronic\_Illness\_And\_Sought\_Medical\_Care\_Female\_Rural double,  
KK\_Chronic\_Illness\_And\_Sought\_Medical\_Care\_Female\_Urban double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Diabetes\_Person\_Total double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Diabetes\_Person\_Rural double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Diabetes\_Person\_Urban double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Diabetes\_Male\_Total double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Diabetes\_Male\_Rural double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Diabetes\_Male\_Urban double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Diabetes\_Female\_Total double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Diabetes\_Female\_Rural double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Diabetes\_Female\_Urban double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Hypertension\_Person\_Total double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Hypertension\_Person\_Rural double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Hypertension\_Person\_Urban double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Hypertension\_Male\_Total double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Hypertension\_Male\_Rural double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Hypertension\_Male\_Urban double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Hypertension\_Female\_Total double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Hypertension\_Female\_Rural double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Hypertension\_Female\_Urban double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Tb\_Person\_Total double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Tb\_Person\_Rural double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Tb\_Person\_Urban double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Tb\_Male\_Total double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Tb\_Male\_Rural double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Tb\_Male\_Urban double,  
KK\_Diag\_For\_Chronic\_Ill\_Per\_100000\_Tb\_Female\_Total double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Tb\_Female\_Rural double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Tb\_Female\_Urban double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Asthma\_Person\_Total double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Asthma\_Person\_Rural double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Asthma\_Person\_Urban double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Asthma\_Male\_Total double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Asthma\_Male\_Rural double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Asthma\_Male\_Urban double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Asthma\_Female\_Total double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Asthma\_Female\_Rural double,  
KK\_Diagnosed\_For\_Chronic\_Illness\_Per\_100000\_Asthma\_Female\_Urban double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Arthritis\_Person\_Total double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Arthritis\_Person\_Rural double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Arthritis\_Person\_Urban double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Arthritis\_Male\_Total double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Arthritis\_Male\_Rural double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Arthritis\_Male\_Urban double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Arthritis\_Female\_Total double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Arthritis\_Female\_Rural double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Arthritis\_Female\_Urban double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Any\_Kind\_Person\_Total double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Any\_Kind\_Person\_Rural double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Any\_Kind\_Of\_Person\_Urban double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Any\_Kind\_Of\_Male\_Total double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Any\_Kind\_Of\_Male\_Rural double,  
KK\_Diag\_For\_Chronic\_Illness\_Per\_100000\_Any\_Kind\_Of\_Male\_Urban double,

KK Diag For Chronic Illness Per 100000 Any Kind Of Female Total double,  
KK Diag For Chronic Illness Per 100000 Any Kind Of Female Rural double,  
KK Diag For Chronic Illness Per 100000 Any Kind Of Female Urban double,  
KK Chronic Illness And Getting Regular Treatment Person Total double,  
KK Chronic Illness And Getting Regular Treatment Person Rural double,  
KK Chronic Illness And Getting Regular Treatment Person Urban double,  
KK Chronic Illness And Getting Regular Treatment Male Total double,  
KK Chronic Illness And Getting Regular Treatment Male Rural double,  
KK Chronic Illness And Getting Regular Treatment Male Urban double,  
KK Chronic Illness And Getting Regular Treatment Female Total double,  
KK Chronic Illness And Getting Regular Treatment Female Rural double,  
KK Chronic Illness And Getting Regular Treatment Female Urban double,  
KK Chronic Ill And Getting Regular Treatment Govt Person Total double,  
KK Chronic Ill And Getting Regular Treatment Govt Person Rural double,  
KK Chronic Ill And Getting Regular Treatment Govt Person Urban double,  
KK Chronic Ill And Getting Regular Treatment Govt Male Total double,  
KK Chronic Ill And Getting Regular Treatment Govt Male Rural double,  
KK Chronic Ill And Getting Regular Treatment Govt Male Urban double,  
KK Chronic Ill And Getting Regular Treatment Govt Female Total double,  
KK Chronic Ill And Getting Regular Treatment Govt Female Rural double,  
KK Chronic Ill And Getting Regular Treatment Govt Female Urban double,  
LL Crude Birth Rate Cbr Total double,  
LL Crude Birth Rate Cbr Rural double,  
LL Crude Birth Rate Cbr Urban double,  
LL Natural Growth Rate Total double,  
LL Natural Growth Rate Rural double,  
LL Natural Growth Rate Urban double,  
LL Total Fertility Rate Total double,  
LL Total Fertility Rate Rural double,  
LL Total Fertility Rate Urban double,  
LL Women 20 24 Reporting Birth Of Order 2 Above Total double,  
LL Women 20 24 Reporting Birth Of Order 2 Above Rural double,  
LL Women 20 24 Reporting Birth Of Order 2 Above Urban double,  
LL Women Reporting Birth Of Order 3 Above Total double,  
LL Women Reporting Birth Of Order 3 Above Rural double,  
LL Women Reporting Birth Of Order 3 Above Urban double,  
LL Women With Two Children Wanting No More Children Total double,  
LL Women With Two Children Wanting No More Children Rural double,  
LL Women With Two Children Wanting No More Children Urban double,  
LL Women 15 19 Years Who Were Already Mothers Or Pregnant Total double,  
LL Women 15 19 Years Who Were Already Mothers Or Pregnant Rural double,  
LL Women 15 19 Years Who Were Already Mothers Or Pregnant Urban double,  
LL Median Age At First Live Birth Of Women 15 49 Years Total double,  
LL Median Age At First Live Birth Of Women 15 49 Years Rural double,  
LL Median Age At First Live Birth Of Women 15 49 Years Urban double,  
LL Median Age At First Live Birth Of Women 25 49 Years Total double,  
LL Median Age At First Live Birth Of Women 25 49 Years Rural double,  
LL Median Age At First Live Birth Of Women 25 49 Years Urban double,  
LL Live Births Taking Place After An Interval Of 36 Months Total double,  
LL Live Births Taking Place After An Interval Of 36 Months Rural double,  
LL Live Births Taking Place After An Interval Of 36 Months Urban double,  
LL Mean Number Of Children Ever Born To Women 15 49 Years Total double,  
LL Mean Number Of Children Ever Born To Women 15 49 Years Rural double,  
LL Mean Number Of Children Ever Born To Women 15 49 Years Urban double,  
LL Mean Number Of Children Surviving To Women 15 49 Years Total double,  
LL Mean Number Of Children Surviving To Women 15 49 Years Rural double,  
LL Mean Number Of Children Surviving To Women 15 49 Years Urban double,

LL\_Mean\_Number\_Of\_Children\_Ever\_Born\_To\_Women\_45\_49\_Years\_Total double,  
LL\_Mean\_Number\_Of\_Children\_Ever\_Born\_To\_Women\_45\_49\_Years\_Rural double,  
LL\_Mean\_Number\_Of\_Children\_Ever\_Born\_To\_Women\_45\_49\_Years\_Urban double,  
MM\_Pregnancy\_To\_Women\_15\_49\_Years\_Resulting\_In\_Abortion\_Total double,  
MM\_Pregnancy\_To\_Women\_15\_49\_Years\_Resulting\_In\_Abortion\_Rural double,  
MM\_Pregnancy\_To\_Women\_15\_49\_Years\_Resulting\_In\_Abortion\_Urban double,  
MM\_Women\_Who\_Received\_Any\_Anc\_Before\_Abortion\_Total double,  
MM\_Women\_Who\_Received\_Any\_Anc\_Before\_Abortion\_Rural double,  
MM\_Women\_Who\_Received\_Any\_Anc\_Before\_Abortion\_Urban double,  
MM\_Women\_Who\_Went\_For\_Ultrasound\_Before\_Abortion\_Total double,  
MM\_Women\_Who\_Went\_For\_Ultrasound\_Before\_Abortion\_Rural double,  
MM\_Women\_Who\_Went\_For\_Ultrasound\_Before\_Abortion\_Urban double,  
MM\_Average\_Month\_Of\_Pregnancy\_At\_The\_Time\_Of\_Abortion\_Total double,  
MM\_Average\_Month\_Of\_Pregnancy\_At\_The\_Time\_Of\_Abortion\_Rural double,  
MM\_Average\_Month\_Of\_Pregnancy\_At\_The\_Time\_Of\_Abortion\_Urban double,  
MM\_Abortion\_Performed\_By\_Skilled\_Health\_Personnel\_Total double,  
MM\_Abortion\_Performed\_By\_Skilled\_Health\_Personnel\_Rural double,  
MM\_Abortion\_Performed\_By\_Skilled\_Health\_Personnel\_Urban double,  
MM\_Abortion\_Taking\_Place\_In\_Institution\_Total double,  
MM\_Abortion\_Taking\_Place\_In\_Institution\_Rural double,  
MM\_Abortion\_Taking\_Place\_In\_Institution\_Urban double,  
NN\_Current\_Usage\_Any\_Method\_Total double,  
NN\_Current\_Usage\_Any\_Method\_Rural double,  
NN\_Current\_Usage\_Any\_Method\_Urban double,  
NN\_Current\_Usage\_Any\_Modern\_Method\_Total double,  
NN\_Current\_Usage\_Any\_Modern\_Method\_Rural double,  
NN\_Current\_Usage\_Any\_Modern\_Method\_Urban double,  
NN\_Current\_Usage\_Female\_Sterilization\_Total double,  
NN\_Current\_Usage\_Female\_Sterilization\_Rural double,  
NN\_Current\_Usage\_Female\_Sterilization\_Urban double,  
NN\_Current\_Usage\_Male\_Sterilization\_Total double,  
NN\_Current\_Usage\_Male\_Sterilization\_Rural double,  
NN\_Current\_Usage\_Male\_Sterilization\_Urban double,  
NN\_Current\_Usage\_Copper\_T\_Iud\_Total double,  
NN\_Current\_Usage\_Copper\_T\_Iud\_Rural double,  
NN\_Current\_Usage\_Copper\_T\_Iud\_Urban double,  
NN\_Current\_Usage\_Pills\_Total double,  
NN\_Current\_Usage\_Pills\_Rural double,  
NN\_Current\_Usage\_Pills\_Urban double,  
NN\_Current\_Usage\_Condom\_Nirodh\_Total double,  
NN\_Current\_Usage\_Condom\_Nirodh\_Rural double,  
NN\_Current\_Usage\_Condom\_Nirodh\_Urban double,  
NN\_Current\_Usage\_Emergency\_Contraceptive\_Pills\_Total double,  
NN\_Current\_Usage\_Emergency\_Contraceptive\_Pills\_Rural double,  
NN\_Current\_Usage\_Emergency\_Contraceptive\_Pills\_Urban double,  
NN\_Current\_Usage\_Any\_Traditional\_Method\_Total double,  
NN\_Current\_Usage\_Any\_Traditional\_Method\_Rural double,  
NN\_Current\_Usage\_Any\_Traditional\_Method\_Urban double,  
NN\_Current\_Usage\_Periodic\_Abstinence\_Total double,  
NN\_Current\_Usage\_Periodic\_Abstinence\_Rural double,  
NN\_Current\_Usage\_Periodic\_Abstinence\_Urban double,  
NN\_Current\_Usage\_Withdrawal\_Total double,  
NN\_Current\_Usage\_Withdrawal\_Rural double,  
NN\_Current\_Usage\_Withdrawal\_Urban double,  
NN\_Current\_Usage\_Lam\_Total double,  
NN\_Current\_Usage\_Lam\_Rural double,  
NN\_Current\_Usage\_Lam\_Urban double,

OO\_Unmet\_Need\_For\_Spacing\_Total double,  
OO\_Unmet\_Need\_For\_Spacing\_Rural double,  
OO\_Unmet\_Need\_For\_Spacing\_Urban double,  
OO\_Unmet\_Need\_For\_Limiting\_Total double,  
OO\_Unmet\_Need\_For\_Limiting\_Rural double,  
OO\_Unmet\_Need\_For\_Limiting\_Urban double,  
OO\_Total\_Unmet\_Need\_Total double,  
OO\_Total\_Unmet\_Need\_Rural double,  
OO\_Total\_Unmet\_Need\_Urban double,  
PP\_Married\_Pregnant\_Women\_15\_49\_Years\_Registered\_For\_Anc\_Total double,  
PP\_Married\_Pregnant\_Women\_15\_49\_Years\_Registered\_For\_Anc\_Rural double,  
PP\_Married\_Pregnant\_Women\_15\_49\_Years\_Registered\_For\_Anc\_Urban double,  
PP\_Mothers\_Who\_Received\_Any\_Antenatal\_Check\_Up\_Total double,  
PP\_Mothers\_Who\_Received\_Any\_Antenatal\_Check\_Up\_Rural double,  
PP\_Mothers\_Who\_Received\_Any\_Antenatal\_Check\_Up\_Urban double,  
PP\_Mothers\_Who\_Had\_Antenatal\_Check\_Up\_In\_First\_Trimester\_Total double,  
PP\_Mothers\_Who\_Had\_Antenatal\_Check\_Up\_In\_First\_Trimester\_Rural double,  
PP\_Mothers\_Who\_Had\_Antenatal\_Check\_Up\_In\_First\_Trimester\_Urban double,  
PP\_Mothers\_Who\_Received\_3\_Or\_More\_Antenatal\_Care\_Total double,  
PP\_Mothers\_Who\_Received\_3\_Or\_More\_Antenatal\_Care\_Rural double,  
PP\_Mothers\_Who\_Received\_3\_Or\_More\_Antenatal\_Care\_Urban double,  
PP\_Mothers\_Who\_Received\_At\_Least\_One\_Tt\_Injection\_Total double,  
PP\_Mothers\_Who\_Received\_At\_Least\_One\_Tt\_Injection\_Rural double,  
PP\_Mothers\_Who\_Received\_At\_Least\_One\_Tt\_Injection\_Urban double,  
PP\_Mothers\_Who\_Consumed\_Ifa\_For\_100\_Days\_Or\_More\_Total double,  
PP\_Mothers\_Who\_Consumed\_Ifa\_For\_100\_Days\_Or\_More\_Rural double,  
PP\_Mothers\_Who\_Consumed\_Ifa\_For\_100\_Days\_Or\_More\_Urban double,  
PP\_Mothers\_Who\_Had\_Full\_Antenatal\_Check\_Up\_Total double,  
PP\_Mothers\_Who\_Had\_Full\_Antenatal\_Check\_Up\_Rural double,  
PP\_Mothers\_Who\_Had\_Full\_Antenatal\_Check\_Up\_Urban double,  
PP\_Mothers\_Who\_Received\_Anc\_From\_Govt\_Source\_Total double,  
PP\_Mothers\_Who\_Received\_Anc\_From\_Govt\_Source\_Rural double,  
PP\_Mothers\_Who\_Received\_Anc\_From\_Govt\_Source\_Urban double,  
PP\_Mothers\_Whose\_Blood\_Pressure\_Bp\_Taken\_Total double,  
PP\_Mothers\_Whose\_Blood\_Pressure\_Bp\_Taken\_Rural double,  
PP\_Mothers\_Whose\_Blood\_Pressure\_Bp\_Taken\_Urban double,  
PP\_Mothers\_Whose\_Blood\_Taken\_For\_Hb\_Total double,  
PP\_Mothers\_Whose\_Blood\_Taken\_For\_Hb\_Rural double,  
PP\_Mothers\_Whose\_Blood\_Taken\_For\_Hb\_Urban double,  
PP\_Mothers\_Who\_Underwent\_Ultrasound\_Total double,  
PP\_Mothers\_Who\_Underwent\_Ultrasound\_Rural double,  
PP\_Mothers\_Who\_Underwent\_Ultrasound\_Urban double,  
QQ\_Institutional\_Delivery\_Total double,  
QQ\_Institutional\_Delivery\_Rural double,  
QQ\_Institutional\_Delivery\_Urban double,  
QQ\_Delivery\_At\_Government\_Institution\_Total double,  
QQ\_Delivery\_At\_Government\_Institution\_Rural double,  
QQ\_Delivery\_At\_Government\_Institution\_Urban double,  
QQ\_Delivery\_At\_Private\_Institution\_Total double,  
QQ\_Delivery\_At\_Private\_Institution\_Rural double,  
QQ\_Delivery\_At\_Private\_Institution\_Urban double,  
QQ\_Delivery\_At\_Home\_Total double,  
QQ\_Delivery\_At\_Home\_Rural double,  
QQ\_Delivery\_At\_Home\_Urban double,  
QQ\_Delivery\_At\_Home\_Conducted\_By\_Skilled\_Health\_Personnel\_Total double,  
QQ\_Delivery\_At\_Home\_Conducted\_By\_Skilled\_Health\_Personnel\_Rural double,  
QQ\_Delivery\_At\_Home\_Conducted\_By\_Skilled\_Health\_Personnel\_Urban double,



QQ Safe Delivery Total double,  
QQ Safe Delivery Rural double,  
QQ Safe Delivery Urban double,  
QQ Caesarean Out Of Total Delivery In Government Total double,  
QQ Caesarean Out Of Total Delivery In Government Rural double,  
QQ Caesarean Out Of Total Delivery In Government Urban double,  
QQ Caesarean Out Of Total Delivery In Private Total double,  
QQ Caesarean Out Of Total Delivery In Private Rural double,  
QQ Caesarean Out Of Total Delivery In Private Urban double,  
RR Less Than 24 Hrs Stay In Institution After Delivery Total double,  
RR Less Than 24 Hrs Stay In Institution After Delivery Rural double,  
RR Less Than 24 Hrs Stay In Institution After Delivery Urban double,  
RR Mothers Who Received Within 48 Hrs Of Delivery Total double,  
RR Mothers Who Received Within 48 Hrs Of Delivery Rural double,  
RR Mothers Who Received Within 48 Hrs Of Delivery Urban double,  
RR Mothers Who Received Within 1 Week Of Delivery Total double,  
RR Mothers Who Received Within 1 Week Of Delivery Rural double,  
RR Mothers Who Received Within 1 Week Of Delivery Urban double,  
RR Mothers Who Did Not Receive Any Post Natal Check Up Total double,  
RR Mothers Who Did Not Receive Any Post Natal Check Up Rural double,  
RR Mothers Who Did Not Receive Any Post Natal Check Up Urban double,  
RR New Borns Who Were Checked Up Within 24 Hrs Of Birth Total double,  
RR New Borns Who Were Checked Up Within 24 Hrs Of Birth Rural double,  
RR New Borns Who Were Checked Up Within 24 Hrs Of Birth Urban double,  
SS Aailed Financial Assistance For Delivery Under Jsy Total double,  
SS Aailed Financial Assistance For Delivery Under Jsy Rural double,  
SS Aailed Financial Assistance For Delivery Under Jsy Urban double,  
SS Aailed Financial Assis For Inst Delivery Under Jsy Total double,  
SS Aailed Financial Assis For Inst Delivery Under Jsy Rural double,  
SS Aailed Financial Assis For Inst Delivery Under Jsy Urban double,  
SS Aailed Financial Assis For Govt Delivery Under Jsy Total double,  
SS Aailed Financial Assis For Govt Delivery Under Jsy Rural double,  
SS Aailed Financial Assis For Govt Delivery Under Jsy Urban double,  
TT Children Aged 12 23 Months Having Immunization Card Total double,  
TT Children Aged 12 23 Months Having Immunization Card Rural double,  
TT Children Aged 12 23 Months Having Immunization Card Urban double,  
TT Children Aged 12 23 Months Who Have Received Bcg Total double,  
TT Children Aged 12 23 Months Who Have Received Bcg Rural double,  
TT Children Aged 12 23 Months Who Have Received Bcg Urban double,  
TT Children 12 23 Months Received 3 Doses Of Polio Vaccine Total double,  
TT Children 12 23 Months Received 3 Doses Of Polio Vaccine Rural double,  
TT Children 12 23 Months Received 3 Doses Of Polio Vaccine Urban double,  
TT Children 12 23 Months Received 3 Doses Of Dpt Vaccine Total double,  
TT Children 12 23 Months Received 3 Doses Of Dpt Vaccine Rural double,  
TT Children 12 23 Months Received 3 Doses Of Dpt Vaccine Urban double,  
TT Children Aged 12 23 Months Received Measles Vaccine Total double,  
TT Children Aged 12 23 Months Received Measles Vaccine Rural double,  
TT Children Aged 12 23 Months Received Measles Vaccine Urban double,  
TT Children Aged 12 23 Months Fully Immunized Total double,  
TT Children Aged 12 23 Months Fully Immunized Rural double,  
TT Children Aged 12 23 Months Fully Immunized Urban double,  
TT Children Who Have Received Polio Dose At Birth Total double,  
TT Children Who Have Received Polio Dose At Birth Rural double,  
TT Children Who Have Received Polio Dose At Birth Urban double,  
TT Children Who Did Not Receive Any Vaccination Total double,  
TT Children Who Did Not Receive Any Vaccination Rural double,  
TT Children Who Did Not Receive Any Vaccination Urban double,

TT\_Children\_6\_35\_Mon\_At\_Least\_1\_Vit\_A\_Dose\_Last\_6\_Months\_Total double,  
TT\_Children\_6\_35\_Mon\_At\_Least\_1\_Vit\_A\_Dose\_Last\_6\_Months\_Rural double,  
TT\_Children\_6\_35\_Mon\_At\_Least\_1\_Vit\_A\_Dose\_Last\_6\_Months\_Urban double,  
TT\_Children\_6\_35\_Mon\_Ifa\_Tablets\_Syrup\_Last\_3\_Months\_Total double,  
TT\_Children\_6\_35\_Mon\_Ifa\_Tablets\_Syrup\_Last\_3\_Months\_Rural double,  
TT\_Children\_6\_35\_Mon\_Ifa\_Tablets\_Syrup\_Last\_3\_Months\_Urban double,  
TT\_Children\_Whose\_Birth\_Weight\_Was\_Taken\_Total double,  
TT\_Children\_Whose\_Birth\_Weight\_Was\_Taken\_Rural double,  
TT\_Children\_Whose\_Birth\_Weight\_Was\_Taken\_Urban double,  
TT\_Children\_With\_Birth\_Weight\_Less\_Than\_2\_5\_Kg\_Total double,  
TT\_Children\_With\_Birth\_Weight\_Less\_Than\_2\_5\_Kg\_Rural double,  
TT\_Children\_With\_Birth\_Weight\_Less\_Than\_2\_5\_Kg\_Urban double,  
UU\_Children\_Suffering\_From\_Diarrhoea\_Total double,  
UU\_Children\_Suffering\_From\_Diarrhoea\_Rural double,  
UU\_Children\_Suffering\_From\_Diarrhoea\_Urban double,  
UU\_Children\_Diarrhoea\_Who\_Received\_Haf\_Ors\_Ort\_Total double,  
UU\_Children\_Diarrhoea\_Who\_Received\_Haf\_Ors\_Ort\_Rural double,  
UU\_Children\_Diarrhoea\_Who\_Received\_Haf\_Ors\_Ort\_Urban double,  
UU\_Children\_Suffering\_From\_Acute\_Respiratory\_Infection\_Total double,  
UU\_Children\_Suffering\_From\_Acute\_Respiratory\_Infection\_Rural double,  
UU\_Children\_Suffering\_From\_Acute\_Respiratory\_Infection\_Urban double,  
UU\_Children\_Acute\_Respiratory\_Infection\_Sought\_Treatment\_Total double,  
UU\_Children\_Acute\_Respiratory\_Infection\_Sought\_Treatment\_Rural double,  
UU\_Children\_Acute\_Respiratory\_Infection\_Sought\_Treatment\_Urban double,  
UU\_Children\_Suffering\_From\_Fever\_Total double,  
UU\_Children\_Suffering\_From\_Fever\_Rural double,  
UU\_Children\_Suffering\_From\_Fever\_Urban double,  
UU\_Children\_Suffering\_From\_Fever\_Who\_Sought\_Treatment\_Total double,  
UU\_Children\_Suffering\_From\_Fever\_Who\_Sought\_Treatment\_Rural double,  
UU\_Children\_Suffering\_From\_Fever\_Who\_Sought\_Treatment\_Urban double,  
VV\_Children\_Breastfed\_Within\_One\_Hour\_Of\_Birth\_Total double,  
VV\_Children\_Breastfed\_Within\_One\_Hour\_Of\_Birth\_Rural double,  
VV\_Children\_Breastfed\_Within\_One\_Hour\_Of\_Birth\_Urban double,  
VV\_Children\_6\_35\_Mon\_Excl\_Breastfed\_For\_At\_Least\_6\_Mon\_Total double,  
VV\_Children\_6\_35\_Mon\_Excl\_Breastfed\_For\_At\_Least\_6\_Mon\_Rural double,  
VV\_Children\_6\_35\_Mon\_Excl\_Breastfed\_For\_At\_Least\_6\_Mon\_Urban double,  
VV\_Other\_Than\_Breast\_Milk\_During\_First\_6\_Months\_Water\_Total double,  
VV\_Other\_Than\_Breast\_Milk\_During\_First\_6\_Months\_Water\_Rural double,  
VV\_Other\_Than\_Breast\_Milk\_During\_First\_6\_Months\_Water\_Urban double,  
VV\_1st\_6\_Months\_Animal\_Formula\_Milk\_Total double,  
VV\_1st\_6\_Months\_Animal\_Formula\_Milk\_Rural double,  
VV\_1st\_6\_Months\_Animal\_Formula\_Milk\_Urban double,  
VV\_1st\_6\_Months\_Semi\_Solid\_Mashed\_Food\_Total double,  
VV\_1st\_6\_Months\_Semi\_Solid\_Mashed\_Food\_Rural double,  
VV\_1st\_6\_Months\_Semi\_Solid\_Mashed\_Food\_Urban double,  
VV\_1st\_6\_Months\_Solid\_Adult\_Food\_Total double,  
VV\_1st\_6\_Months\_Solid\_Adult\_Food\_Rural double,  
VV\_1st\_6\_Months\_Solid\_Adult\_Food\_Urban double,  
VV\_1st\_6\_Months\_Vegetables\_Fruits\_Total double,  
VV\_1st\_6\_Months\_Vegetables\_Fruits\_Rural double,  
VV\_1st\_6\_Months\_Vegetables\_Fruits\_Urban double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Water\_Total double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Water\_Rural double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Water\_Urban double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Animal\_Formula\_Milk\_Total double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Animal\_Formula\_Milk\_Rural double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Animal\_Formula\_Milk\_Urban double,

VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Semi\_Solid\_Mashed\_Food\_Total double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Semi\_Solid\_Mashed\_Food\_Rural double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Semi\_Solid\_Mashed\_Food\_Urban double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Solid\_Adult\_Food\_Total double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Solid\_Adult\_Food\_Rural double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Solid\_Adult\_Food\_Urban double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Vegetables\_Fruits\_Total double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Vegetables\_Fruits\_Rural double,  
VV\_Avg\_Month\_Other\_Than\_Breast\_Milk\_Vegetables\_Fruits\_Urban double,  
WW\_Birth\_Registered\_Total double,  
WW\_Birth\_Registered\_Rural double,  
WW\_Birth\_Registered\_Urban double,  
WW\_Children\_Registered\_And\_Received\_Birth\_Certificate\_Total double,  
WW\_Children\_Registered\_And\_Received\_Birth\_Certificate\_Rural double,  
WW\_Children\_Registered\_And\_Received\_Birth\_Certificate\_Urban double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Hiv\_Aids\_Total double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Hiv\_Aids\_Rural double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Hiv\_Aids\_Urban double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Rti\_Sti\_Total double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Rti\_Sti\_Rural double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Rti\_Sti\_Urban double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Haf\_Ors\_Ort\_Zinc\_Total double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Haf\_Ors\_Ort\_Zinc\_Rural double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Haf\_Ors\_Ort\_Zinc\_Urban double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Danger\_Signs\_Of\_Ari\_Pneumonia\_Total double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Danger\_Signs\_Of\_Ari\_Pneumonia\_Rural double,  
XX\_Women\_Who\_Are\_Aware\_Of\_Danger\_Signs\_Of\_Ari\_Pneumonia\_Urban double,  
YY\_Crude\_Death\_Rate\_Cdr\_Total\_Person double,  
YY\_Crude\_Death\_Rate\_Cdr\_Total\_Male double,  
YY\_Crude\_Death\_Rate\_Cdr\_Total\_Female double,  
YY\_Crude\_Death\_Rate\_Cdr\_Rural\_Person double,  
YY\_Crude\_Death\_Rate\_Cdr\_Rural\_Male double,  
YY\_Crude\_Death\_Rate\_Cdr\_Rural\_Female double,  
YY\_Crude\_Death\_Rate\_Cdr\_Urban\_Person double,  
YY\_Crude\_Death\_Rate\_Cdr\_Urban\_Male double,  
YY\_Crude\_Death\_Rate\_Cdr\_Urban\_Female double,  
YY\_Infant\_Mortality\_Rate\_Imr\_Total\_Person double,  
YY\_Infant\_Mortality\_Rate\_Imr\_Total\_Male double,  
YY\_Infant\_Mortality\_Rate\_Imr\_Total\_Female double,  
YY\_Infant\_Mortality\_Rate\_Imr\_Rural\_Person double,  
YY\_Infant\_Mortality\_Rate\_Imr\_Rural\_Male double,  
YY\_Infant\_Mortality\_Rate\_Imr\_Rural\_Female double,  
YY\_Infant\_Mortality\_Rate\_Imr\_Urban\_Person double,  
YY\_Infant\_Mortality\_Rate\_Imr\_Urban\_Male double,  
YY\_Infant\_Mortality\_Rate\_Imr\_Urban\_Female double,  
YY\_Neo\_Natal\_Mortality\_Rate\_Total double,  
YY\_Neo\_Natal\_Mortality\_Rate\_Rural double,  
YY\_Neo\_Natal\_Mortality\_Rate\_Urban double,  
YY\_Post\_Neo\_Natal\_Mortality\_Rate\_Total double,  
YY\_Post\_Neo\_Natal\_Mortality\_Rate\_Rural double,  
YY\_Post\_Neo\_Natal\_Mortality\_Rate\_Urban double,  
YY\_Under\_Five\_Mortality\_Rate\_U5MR\_Total\_Person double,  
YY\_Under\_Five\_Mortality\_Rate\_U5MR\_Total\_Male double,  
YY\_Under\_Five\_Mortality\_Rate\_U5MR\_Total\_Female double,  
YY\_Under\_Five\_Mortality\_Rate\_U5MR\_Rural\_Person double,  
YY\_Under\_Five\_Mortality\_Rate\_U5MR\_Rural\_Male double,  
YY\_Under\_Five\_Mortality\_Rate\_U5MR\_Rural\_Female double,

```

YY_Under_Five_Mortality_Rate_U5MR_Urban_Person double,
YY_Under_Five_Mortality_Rate_U5MR_Urban_Male double,
YY_Under_Five_Mortality_Rate_U5MR_Urban_Female double,
ZZ_Crude_Birth_Rate_Total_Lower_Limit double,
ZZ_Crude_Birth_Rate_Total_Upper_Limit double,
ZZ_Crude_Birth_Rate_Rural_Lower_Limit double,
ZZ_Crude_Birth_Rate_Rural_Upper_Limit double,
ZZ_Crude_Birth_Rate_Urban_Lower_Limit double,
ZZ_Crude_Birth_Rate_Urban_Upper_Limit double,
ZZ_Crude_Death_Rate_Total_Lower_Limit double,
ZZ_Crude_Death_Rate_Total_Upper_Limit double,
ZZ_Crude_Death_Rate_Rural_Lower_Limit double,
ZZ_Crude_Death_Rate_Rural_Upper_Limit double,
ZZ_Crude_Death_Rate_Urban_Lower_Limit double,
ZZ_Crude_Death_Rate_Urban_Upper_Limit double,
ZZ_Infant_Mortality_Rate_Total_Lower_Limit double,
ZZ_Infant_Mortality_Rate_Total_Upper_Limit double,
ZZ_Infant_Mortality_Rate_Rural_Lower_Limit double,
ZZ_Infant_Mortality_Rate_Rural_Upper_Limit double,
ZZ_Infant_Mortality_Rate_Urban_Lower_Limit double,
ZZ_Infant_Mortality_Rate_Urban_Upper_Limit double,
ZZ_Under_Five_Mortality_Rate_U5MR_Total_Lower_Limit double,
ZZ_Under_Five_Mortality_Rate_U5MR_Total_Upper_Limit double,
ZZ_Under_Five_Mortality_Rate_U5MR_Rural_Lower_Limit double,
ZZ_Under_Five_Mortality_Rate_U5MR_Rural_Upper_Limit double,
ZZ_Under_Five_Mortality_Rate_U5MR_Urban_Lower_Limit double,
ZZ_Under_Five_Mortality_Rate_U5MR_Urban_Upper_Limit double,
ZZ_Sex_Ratio_At_Birth_Total_Lower_Limit double,
ZZ_Sex_Ratio_At_Birth_Total_Upper_Limit double,
ZZ_Sex_Ratio_At_Birth_Rural_Lower_Limit double,
ZZ_Sex_Ratio_At_Birth_Rural_Upper_Limit double,
ZZ_Sex_Ratio_At_Birth_Urban_Lower_Limit double,
ZZ_Sex_Ratio_At_Birth_Urban_Upper_Limit double
) row format delimited fields terminated by ',';

```

4. Give permissions to /user/ec2-user directory:

```
[ec2-user@ip-10-0-0-243 ~]$ hdfs dfs -chmod -R 777 /user/ec2-user
```

5. Command to load the ingested data into the external table

```
hive> load data inpath '/user/ec2-user/Key_indicator_districtwise' into table
key_indicative_ext;
```

6. Queries to verify that the ingestion is correctly accomplished

Query to count the total number of rows fetched by the query Hue. Query to count the total number of rows along with the screenshots of the data fetched by the query on MySQL Workbench and Hue.

```
Select count(*)
From key_indicative_ext;
```

Screen Capture from HUE:

Hive interface showing a query execution result:

```
1 Select count(*) FROM key_indicative_ext;
```

27.44s default text ?

Log output:

```
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.21 sec HDFS Read: 1274271 HDFS Write: 4 SUCCESS
INFO : Total MapReduce CPU Time Spent: 6 seconds 210 msec
INFO : Completed executing command(queryId=hive_20190825142222_85b09a8f-505e-4a3d-a682-74a199873083); Time taken: 24.811 seconds
INFO : OK
```

Query History Saved Queries Results (1)

| _c0 |
|-----|
| 284 |

#### Screen Capture from MySql Workbench:

MySQL Workbench interface showing a query execution result:

```
1 show databases;
2 Use indiaaahs2012_13;
3
4 show tables;
5
6 Select count(*) from Key_indicator_districtwise;
7
```

Limit to 1000 rows

Result Grid

| count(*) |
|----------|
| 284      |

7. Query to select the top 10 rows and first 8 columns of the data fetched by the query on Hue.

```
Select
    ID,
    State_Name,
    State_District_Name,
    AA_Sample_Units_Total,
    AA_Sample_Units_Rural,
    AA_Sample_Units_Urban,
    AA_Households_Total,
    AA_Households_Rural
From key_indicative_ext limit 10;
```

Hive interface showing a query execution result:

```

1 Select
2   ID,
3   State_Name,
4   State_District_Name,
5   AA_Sample_Units_Total,
6   AA_Sample_Units_Rural,
7   AA_Sample_Units_Urban,
8   AA_Households_Total,
9   AA_Households_Rural
10 From key_indicative_ext limit 10;
11

```

Query execution details:

```

AA_Households_Total,
AA_Households_Rural
From key_indicative_ext limit 10
INFO : Completed executing command(queryId=hive_20190825142727_5cc8ce50-8d61-4d26-9106-caeddb3baf47); Time taken: 0.002 seconds
INFO : OK

```

Query History, Saved Queries, Results (10)

|   | id | state_name | state_district_name | aa_sample_units_total | aa_sample_units_rural | aa_sample_units_urban | aa_households_ |
|---|----|------------|---------------------|-----------------------|-----------------------|-----------------------|----------------|
| 1 | 1  | Assam      | Barpeta             | 53                    | 47                    | 6                     | 13711          |
| 2 | 2  | Assam      | Bongaigaon          | 89                    | 73                    | 16                    | 17384          |
| 3 | 3  | Assam      | Cachar              | 105                   | 84                    | 21                    | 27488          |
| 4 | 4  | Assam      | Darrang             | 26                    | 24                    | 2                     | 5951           |
| 5 | 5  | Assam      | Dhemaji             | 121                   | 108                   | 13                    | 14481          |
| 6 | 6  | Assam      | Dhubri              | 42                    | 35                    | 7                     | 11001          |
| 7 | 7  | Assam      | Dibrugarh           | 91                    | 66                    | 25                    | 21378          |

Subset schema creation in Hive to support the analyses:

8. Create a subset schema in Hive to store the data for the analyses to be done. The schema should be optimized to support ONLY the analyses to be done. You will be graded on your choice of the chosen columns, storage format (Parquet, RC, ORC, and CSV), etc. Benchmark the performance of the storage formats before finalizing the one to be used.

Columns used in subset schema creation.

1. state\_name VARCHAR(100),
2. state\_district\_name VARCHAR(100),
3. mortality\_rate DOUBLE,
4. fertility\_rate DOUBLE,
5. population\_total DOUBLE,
6. household\_total DOUBLE,
7. sex\_ratio DOUBLE

Storage Format used ORC

a. Create and insert command for the default format

```

Create table if NOT EXISTS key_indicative_sub_table (
state_name VARCHAR(100),
state_district_name VARCHAR(100),
mortality_rate DOUBLE,
fertility_rate DOUBLE,
population_total DOUBLE,
household_total DOUBLE,
sex_ratio DOUBLE);

```

```

INSERT INTO TABLE key_indicative_sub_table
SELECT state_name,

```

```

state_district_name,
YY_Under_Five_Mortality_Rate_U5MR_Total_Person,
LL_Total_Fertility_Rate_Total,
AA_Population_Total,
AA_Households_Total,
CC_Sex_Ratio_All_Ages_Total
FROM key_indicative_ext;

```

The screenshot shows the Hive web interface. At the top, there's a query editor with the following SQL:

```

1 INSERT INTO TABLE key_indicative_sub_table
2 SELECT state_name,
3 state_district_name,
4 YY_Under_Five_Mortality_Rate_U5MR_Total_Person,
5 LL_Total_Fertility_Rate_Total,
6 AA_Population_Total,
7 AA_Households_Total,
8 CC_Sex_Ratio_All_Ages_Total
9 FROM key_indicative_ext;

```

Below the editor, the execution log shows the following details:

- INFO : Moving data to: hdfs://ip-10-0-0-243.ec2.internal:8020/user/hive/warehouse/key\_indicative\_sub\_table/.hive-staging\_hive\_2019-08-24\_11-06-47\_383\_7018081910731188365-5/-ext-10000 from hdfs://ip-10-0-0-243.ec2.internal:8020/user/hive/warehouse/key\_indicative\_sub\_table/.hive-staging\_hive\_2019-08-24\_11-06-47\_383\_7018081910731188365-5/-ext-10002
- INFO : Starting task [Stage-0:MOVE] in serial mode
- INFO : Loading data to table default:key\_indicative\_sub\_table from hdfs://ip-10-0-0-243.ec2.internal:8020/user/hive/warehouse/key\_indicative\_sub\_table/.hive-staging\_hive\_2019-08-24\_11-06-47\_383\_7018081910731188365-5/-ext-10000
- INFO : Starting task [Stage-2:STATS] in serial mode
- INFO : Table default:key\_indicative\_sub\_table stats: [numFiles=1, numRows=284, totalSize=14771, rawDataSize=14487]
- INFO : MapReduce Jobs Launched:
- INFO : Stage-Stage-1: Map: 1 Cumulative CPU: 3.20 sec HDFS Read: 1188832 HDFS Write: 14863 SUCCESS
- INFO : Total MapReduce CPU Time Spent: 3 seconds 200 msec
- INFO : Completed executing command=queryId=hive\_20190824110605\_04904008-707e-4edf-99ed-c4340d90f922; Time taken: 18.542 seconds
- INFO : OK

At the bottom, the Query History table shows the following entries:

| Query History     | Query   |
|-------------------|---|
| a few seconds ago | INSERT INTO TABLE key_indicative_sub_table SELECT state_name, state_district_name, YY_Under_Five_Mortality_Rate_U5MR_Total_Person, LL_Total_Fertility_Rate_Total, AA_Population_Total, AA_Households_Total, CC_Sex_Ratio_All_Ages_Total FROM key_indicative_ext |
| a minute ago      | Create table if NOT EXISTS key_indicative_sub_table ( state_name VARCHAR(100), state_district_name VARCHAR(100), mortality_rate DOUBLE, fertility_rate DOUBLE, population_total DOUBLE, household_total DOUBLE, sex_ratio DOUBLE)                               |
| 4 minutes ago     | Select ID, State_Name, State_District_Name, AA_Sample_Units_Total, AA_Sample_Units_Rural, AA_Sample_Units_Urban, AA_Households_Total, AA_Households_Rural From key_indicative_ext limit 10  |
| 6 minutes ago     | select count(*) from key_indicative_ext   |
| an hour ago       | Select count(*) FROM key_indicative_ext   |

Give write permission to /user/hive

```

[hdfs@ip-10-0-0-243 ec2-user]$ sudo su hdfs
[hdfs@ip-10-0-0-243 ec2-user]$ hdfs dfs -chmod -R 777 /user/hive
[hdfs@ip-10-0-0-243 ec2-user]$ ctrl + D

```

b. Create and insert command for ORC format:

```

Create table key_indicative_orc_sub_table(
state_name VARCHAR(100),
state_district_name VARCHAR(100),
mortality_rate DOUBLE,
fertility_rate DOUBLE,
population_total DOUBLE,
household_total DOUBLE,
sex_ratio DOUBLE)
STORED AS ORC
LOCATION '/user/hive/orc/cloudera'
TBLPROPERTIES ("orc.compress"="SNAPPY");

```

```

hive> insert into table key_indicative_orc_sub_table
select state_name,
state_district_name,
YY_Under_Five_Mortality_Rate_U5MR_Total_Person,
LL_Total_Fertility_Rate_Total,
AA_Population_Total,
AA_Households_Total,
CC_Sex_Ratio_All_Ages_Total
FROM key_indicative_ext;

```

Hive interface showing a successful query execution. The query inserts data from a source table into a target table. The execution log shows the task completion and the final success message.

```

1 insert into table key_indicative_orc_sub_table
2 select state_name,
3 state_district_name,
4 YY_Under_Five_Mortality_Rate_U5MR_Total_Person,
5 LL_Total_Fertility_Rate_Total,
6 AA_Population_Total,
7 AA_Households_Total,
8 CC_Sex_Ratio_All_Ages_Total
9 FROM key_indicative_ext;
10
11
12
13

```

INFO : Moving data to: hdfs://ip-10-0-0-243.ec2.internal:8020/user/hive/orc/cloudera/.hive-staging\_hive\_2019-08-24\_11-23-48\_855\_1205034751200384758-5/-ext-10000 from hdfs://ip-10-0-0-243.ec2.internal:8020/user/hive/orc/cloudera/.hive-staging\_hive\_2019-08-24\_11-23-48\_855\_1205034751200384758-5/-ext-10000

INFO : Starting task [Stage-0:MOVE] in serial mode

INFO : Loading data to table default.key\_indicative\_orc\_sub\_table from hdfs://ip-10-0-0-243.ec2.internal:8020/user/hive/orc/cloudera/.hive-staging\_hive\_2019-08-24\_11-23-48\_855\_1205034751200384758-5/-ext-10000

INFO : Starting task [Stage-2:STATS] in serial mode

INFO : Table default.key\_indicative\_orc\_sub\_table stats: [numFiles=1, numRows=284, totalSize=9288, rawDataSize=63908]

INFO : MapReduce Jobs Launched:

INFO : Stage-Stage-1: Map: 1 Cumulative CPU: 3.02 sec HDFS Read: 1188993 HDFS Write: 9384 SUCCESS

INFO : Total MapReduce CPU Time Spent: 3 seconds 620 msec

INFO : Completed executing command(queryId=hive\_20190824112323\_edc3303d-90e9-413d-81e6-d7d221fe4013); Time taken: 15.859 seconds

INFO : OK

✓ Success.

| Query History     | Q | Saved Queries   | Q |
|-------------------|---|---|---|
| a few seconds ago | ✚ | insert into table key_indicative_orc_sub_table select state_name, state_district_name, YY_Under_Five_Mortality_Rate_U5MR_Total_Person, LL_Total_Fertility_Rate_Total, AA_Population_Total, AA_Households_Total, CC_Sex_Ratio_All_Ages_Total FROM key_indicative_ext   |   |
| 2 minutes ago     | ✓ | Create table key_indicative_orc_sub_table( state_name VARCHAR(100), state_district_name VARCHAR(100), mortality_rate DOUBLE, fertility_rate DOUBLE, population_total DOUBLE, household_total DOUBLE, sex_ratio DOUBLE) STORED AS ORC LOCATION '/user/hive/orc/cloudera' TBLPROPERTIES ("orc.compress"="SNAPPY") |   |
| 13 minutes ago    | ! | Create table key_indicative_orc_sub_table( state_name VARCHAR(100), state_district_name VARCHAR(100), mortality_rate DOUBLE, fertility_rate DOUBLE, population_total DOUBLE, household_total DOUBLE, sex_ratio DOUBLE) STORED AS ORC LOCATION '/user/hive/orc/cloudera' TBLPROPERTIES ("orc.compress"="SNAPPY") |   |
| 14 minutes ago    | ✓ | select count(*) from key_indicative_sub_table   |   |

### c. Create and insert command for HIVE-HBASE integrated table

```

Create table if NOT EXISTS key_indicative_hbase_sub_tbl (
id int,
state_name VARCHAR(100),
state_district_name VARCHAR(100),
mortality_rate double,
fertility_rate double,
population_total double,
household_total double,
sex_ratio double)
STORED BY 'org.apache.hadoop.hive.hbase.HBaseStorageHandler'
with serdeproperties
("hbase.columns.mapping"=":key,key_indicative:state_name,key_indicative
:state_district_name,key_indicative:mortality_rate,
key_indicative:fertility_rate,key_indicative:population_total,key_indic
ative:household_total,key_indicative:sex_ratio")
tblproperties ("hbase.table.name"="key_indicative_hbase_sub_table");

```

```

INSERT INTO TABLE key_indicative_hbase_sub_tbl
SELECT id,state_name,
state_district_name,
YY_Under_Five_Mortality_Rate_U5MR_Total_Person,
LL_Total_Fertility_Rate_Total,
AA_Population_Total,
AA_Households_Total,
CC_Sex_Ratio_All_Ages_Total
FROM key_indicative_ext;

```



Hive Add a name... Add a description... 3.22s default text ?

```

1 Create table if NOT EXISTS key_indicative_hbase_sub_tbl (
2   id int,
3   state_name VARCHAR(100),
4   state_district_name VARCHAR(100),
5   mortality_rate double,
6   fertility_rate double,
7   population_total double,
8   household_total double,
9   sex_ratio double)
10 STORED BY 'org.apache.hadoop.hive.hbase.HBaseStorageHandler'
11 WITH SERDEPROPERTIES
12   ('hbase.columns.mapping'=:key,key_indicative:state_name,key_indicative:state_district_name,key_indicative:mortality_rate,
13    key_indicative:fertility_rate,key_indicative:population_total,key_indicative:household_total,key_indicative:sex_ratio")
14 tblproperties("hbase.table.name"="key_indicative_hbase_sub_table");
15

```

```

key_indicative:fertility_rate,key_indicative:population_total,key_indicative:household_total,key_indicative:sex_ratio )
tblproperties("hbase.table.name"="key_indicative_hbase_sub_table")
INFO : Starting task [Stage-0:DDL] in serial mode
INFO : Completed executing command(queryId=hive_20190824175959_51e8f696-71b7-44eb-ba5f-2baa45fbef5); Time taken: 2.365 seconds
INFO : OK

```

✓ Success.

Hive Add a name... Add a description... 20.54s default text ?

```

1 INSERT INTO TABLE key_indicative_hbase_sub_tbl
2 SELECT id,state_name,
3 state_district_name,
4 VV_Under_Five_Mortality_Rate_USMR_Total_Person,
5 LL_Total_Fertility_Rate_Total,
6 AA_Population_Total,
7 AA_Households_Total,
8 CC_Sex_Ratio_All_Ages_Total
9 FROM key_indicative_ext;
10
11

```

```

INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-0: Map: 1 Cumulative CPU: 4.28 sec HDFS Read: 1190256 HDFS Write: 0 SUCCESS
INFO : Total MapReduce CPU Time Spent: 4 seconds 280 msec
INFO : Completed executing command(queryId=hive_20190824180202_92adfa67-3762-42c5-9c49-633f7ed18c92); Time taken: 19.187 seconds
INFO : OK

```

✓ Success.

Query History Q ? Saved Queries Q

### a. For Default Format:

```
hive> Select count(*)
From key_indicative_sub_table;
```

Hive Add a name... Add a description... 27.24s default text ?

```

1 Select
2   count(*)
3 From key_indicative_sub_table;
4
5
6
7
8

```

```

INFO : Kill Command = /opt/cloudera/parcels/CDH-5.15.1-1.cdh5.15.1.p0.4/lib/hadoop/bin/hadoop job -kill job_1566638611059_0008
INFO : Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
INFO : 2019-08-24 11:25:10,786 Stage-1 map = 0%, reduce = 0%
INFO : 2019-08-24 11:25:24,181 Stage-1 map = 100%, reduce = 0%, Cumulative CPU 2.41 sec
INFO : 2019-08-24 11:25:31,518 Stage-1 map = 100%, reduce = 100%, Cumulative CPU 6.93 sec
INFO : MapReduce Total cumulative CPU time: 6 seconds 930 msec
INFO : Ended Job = job_1566638611059_0008
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.93 sec HDFS Read: 23684 HDFS Write: 4 SUCCESS
INFO : Total MapReduce CPU Time Spent: 6 seconds 930 msec
INFO : Completed executing command(queryId=hive_20190824112525_c34d2f7b-1614-4f54-bd75-4c9878c97f81); Time taken: 25.444 seconds
INFO : OK

```

Query History Q ? Saved Queries Q Results (1) Q ?

|   | _c0 |
|---|-----|
| 1 | 284 |

```
hive> Select state_name, count(*)
      From key_indicative_sub_table
      Group by state_name;
```

Query History Saved Queries Results (9)

| state_name     | _c1 |
|----------------|-----|
| 1 Assam        | 23  |
| 2 Bihar        | 37  |
| 3 Chhattisgarh | 16  |

Add -- comments on top of the SQL statement to display a title

```
select state_name, count(*) from key_indicative_sub_table group by state_name;
```

```
INFO : Compiling command(queryId=hive_20190820161717_e81edefa-e62b-4570-a043-4ed54e30cb5c): select state_name, count(*) from key_indicative_sub_table group by state_name
INFO : Semantic Analysis Completed
INFO : Returning Hive schema: Schema(fieldSchemas:[FieldSchema(name:state_name, type:varchar(100), comment:null), FieldSchema(name:_c1, type:bigint, comment:null)], properties:null)
```

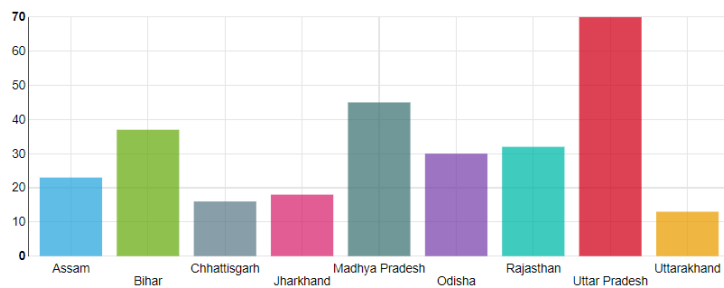
X-AXIS  
state\_name

Y-AXIS  
☒ \_c1

GROUP  
Choose a column to pivot...

LIMIT  
Limit the number of results to...

SORTING  
☐ ☐ ☐



```
hive> Select *
      From key_indicative_sub_table
      Where state_name = 'Uttar Pradesh';
```

| key_indicative_sub_table.state_name | key_indicative_sub_table.state_district_name | key_indicative_sub_table.mortality_rate | key_indicative_sub_table.fertility_rate | key_indicative_sub_table.population_total | key_indicative_sub_table.household_total | key_indicative_sub_table.sex_ratio |
|-------------------------------------|--|---|---|---|--|------------------------------------|
| Uttar Pradesh                       | Agra   | 69                                      | 3.02                                    | 125614                                    | 20911                                    | 873.47                             |
| Uttar Pradesh                       | Aligarh                                      | 90                                      | 3.53                                    | 52583                                     | 8844                                     | 910.76                             |
| Uttar Pradesh                       | Allahabad                                    | 104                                     | 3.16                                    | 61029                                     | 11563                                    | 1016.34                            |
| Uttar Pradesh                       | Ambedkar Nagar                               | 78                                      | 3.03                                    | 44698                                     | 7923                                     | 1114.48                            |
| Uttar Pradesh                       | Auraiya                                      | 84                                      | 3.47                                    | 107619                                    | 21590                                    | 875.68                             |
| Uttar Pradesh                       | Azamgarh                                     | 89                                      | 3.15                                    | 103165                                    | 16962                                    | 1104.91                            |
| Uttar Pradesh                       | Baghpat                                      | 70                                      | 3.03                                    | 95759                                     | 15648                                    | 859.29                             |
| Uttar Pradesh                       | Bahraich                                     | 105                                     | 4.87                                    | 121402                                    | 22906                                    | 896.37                             |
| Uttar Pradesh                       | Ballia                                       | 82                                      | 2.97                                    | 87623                                     | 15606                                    | 992.82                             |
| Uttar Pradesh                       | Balrampur                                    | 117                                     | 4.94                                    | 42016                                     | 7315                                     | 1040.09                            |
| Uttar Pradesh                       | Banda  | 96                                      | 4.13                                    | 59266                                     | 11915                                    | 925.05                             |
| Uttar Pradesh                       | Barabanki                                    | 97                                      | 3.85                                    | 58722                                     | 11232                                    | 895.18                             |
| Uttar Pradesh                       | Bareilly                                     | 104                                     | 3.64                                    | 78492                                     | 13678                                    | 887.13                             |
| Uttar Pradesh                       | Basti  | 106                                     | 3.47                                    | 48055                                     | 8393                                     | 1067.67                            |
| Uttar Pradesh                       | Bijnor                                       | 79                                      | 3.23                                    | 49416                                     | 8748                                     | 963.34                             |
| Uttar Pradesh                       | Budaun                                       | 108                                     | 4.48                                    | 51993                                     | 8999                                     | 915.88                             |
| Uttar Pradesh                       | Bulandshahar                                 | 89                                      | 3.44                                    | 59473                                     | 10578                                    | 912                                |
| Uttar Pradesh                       | Chandauli                                    | 98                                      | 3.29                                    | 92389                                     | 15936                                    | 993.76                             |
| Uttar Pradesh                       | Chitrakoot                                   | 119                                     | 3.6                                     | 88832                                     | 16937                                    | 910.69                             |
| Uttar Pradesh                       | Deoria                                       | 83                                      | 3.12                                    | 65914                                     | 11641                                    | 1171.6                             |
| Uttar Pradesh                       | Etah   | 86                                      | 4.16                                    | 52944                                     | 9054                                     | 884.45                             |
| Uttar Pradesh                       | Etawah                                       | 85                                      | 3.06                                    | 76793                                     | 16067                                    | 857.88                             |
| Uttar Pradesh                       | Faizabad                                     | 115                                     | 3.02                                    | 62219                                     | 12075                                    | 1016.34                            |
| Uttar Pradesh                       | Farrukhabad                                  | 98                                      | 3.68                                    | 54111                                     | 10364                                    | 869.08                             |
| Uttar Pradesh                       | Fatehpur                                     | 81                                      | 3.46                                    | 60209                                     | 11582                                    | 919.64                             |
| Uttar Pradesh                       | Firozabad                                    | 79                                      | 3.57                                    | 62573                                     | 11053                                    | 899.61                             |
| Uttar Pradesh                       | Gautam Buddha Nagar                          | 70                                      | 2.64                                    | 89498                                     | 16323                                    | 836.82                             |
| Uttar Pradesh                       | Ghaziabad                                    | 59                                      | 2.54                                    | 112985                                    | 20612                                    | 862.85                             |
| Uttar Pradesh                       | Ghazipur                                     | 94                                      | 2.97                                    | 62521                                     | 10337                                    | 1064.96                            |
| Uttar Pradesh                       | Gonda  | 97                                      | 4.01                                    | 74324                                     | 14169                                    | 906.07                             |
| Uttar Pradesh                       | Gorakhpur                                    | 76                                      | 2.72                                    | 96497                                     | 17975                                    | 1073.8                             |
| Uttar Pradesh                       | Hamirpur                                     | 66                                      | 3.57                                    | 62783                                     | 13042                                    | 862.22                             |
| Uttar Pradesh                       | Hardoi                                       | 118                                     | 4.23                                    | 52567                                     | 10040                                    | 877.61                             |
| Uttar Pradesh                       | Hathras                                      | 78                                      | 3.2                                     | 55062                                     | 9779                                     | 868.83                             |
| Uttar Pradesh                       | Jalaun                                       | 97                                      | 3.1                                     | 53505                                     | 10675                                    | 880.57                             |
| Uttar Pradesh                       | Jaunpur                                      | 91                                      | 2.87                                    | 43285                                     | 7272                                     | 1037.06                            |
| Uttar Pradesh                       | Jhansi                                       | 59                                      | 2.3                                     | 73590                                     | 16295                                    | 875.12                             |
| Uttar Pradesh                       | Jyotiba Phule Nagar                          | 92                                      | 3.51                                    | 37927                                     | 6546                                     | 930.23                             |
| Uttar Pradesh                       | Kannauj                                      | 102                                     | 3.28                                    | 156432                                    | 27431                                    | 893.92                             |
| Uttar Pradesh                       | Kanpur Dehat                                 | 94                                      | 2.84                                    | 50626                                     | 10543                                    | 873.47                             |
| Uttar Pradesh                       | Kanpur Nagar                                 | 50                                      | 2.11                                    | 144182                                    | 29525                                    | 875.09                             |
| Uttar Pradesh                       | Kaushambi                                    | 113                                     | 3.89                                    | 67572                                     | 13179                                    | 1032.4                             |
| Uttar Pradesh                       | Kheri  | 117                                     | 3.88                                    | 60900                                     | 12004                                    | 888.43                             |
| Uttar Pradesh                       | Kushinagar                                   | 99                                      | 3.33                                    | 48371                                     | 8608                                     | 1136.58                            |
| Uttar Pradesh                       | Lalitpur                                     | 114                                     | 3.4                                     | 39529                                     | 8108                                     | 889.05                             |
| Uttar Pradesh                       | Lucknow                                      | 58                                      | 2.23                                    | 105538                                    | 21138                                    | 898.35                             |

|               |                  |     |      |       |       |         |
|---------------|------------------|-----|------|-------|-------|---------|
| Uttar Pradesh | Maharajganj      | 96  | 3.23 | 68263 | 12950 | 1133.13 |
| Uttar Pradesh | Mahoba           | 73  | 3.55 | 63537 | 13461 | 887.27  |
| Uttar Pradesh | Mainpuri         | 78  | 3.37 | 60823 | 10727 | 885.2   |
| Uttar Pradesh | Mathura          | 58  | 2.98 | 59930 | 10406 | 876.42  |
| Uttar Pradesh | Mau              | 86  | 2.86 | 74750 | 12606 | 1038.26 |
| Uttar Pradesh | Meerut           | 59  | 3.07 | 77688 | 12884 | 900.55  |
| Uttar Pradesh | Mirzapur         | 105 | 2.57 | 38180 | 6709  | 962.7   |
| Uttar Pradesh | Moradabad        | 80  | 3.61 | 66632 | 11054 | 902.28  |
| Uttar Pradesh | Muzaffarnagar    | 71  | 3.22 | 75749 | 12812 | 888.14  |
| Uttar Pradesh | Pilibhit         | 91  | 3.56 | 43038 | 7773  | 880.49  |
| Uttar Pradesh | Pratapgarh       | 104 | 2.9  | 86770 | 15695 | 1142.93 |
| Uttar Pradesh | Rae Bareli       | 80  | 3.29 | 66935 | 12981 | 946.64  |
| Uttar Pradesh | Rampur           | 86  | 3.48 | 66460 | 11435 | 904.74  |
| Uttar Pradesh | Saharanpur       | 99  | 3.31 | 58510 | 10259 | 919.02  |
| Uttar Pradesh | Sant Kabir Nagar | 91  | 3.84 | 43549 | 8028  | 1174.95 |
|               | Sant Ravidas     |     |      |       |       |         |
| Uttar Pradesh | Nagar (Bhadohi)  | 106 | 2.88 | 55736 | 8974  | 998.61  |
| Uttar Pradesh | Shahjahanpur     | 100 | 4.17 | 55307 | 9822  | 853.67  |
| Uttar Pradesh | Shrawasti        | 130 | 5.52 | 38131 | 7483  | 983.63  |
| Uttar Pradesh | Siddharthnagar   | 116 | 4.82 | 56238 | 9919  | 1178.11 |
| Uttar Pradesh | Sitapur          | 114 | 4.42 | 50237 | 9323  | 882.49  |
| Uttar Pradesh | Sonbhadra        | 99  | 3.78 | 33562 | 6838  | 952.06  |
| Uttar Pradesh | Sultanpur        | 66  | 3.03 | 61923 | 11251 | 984.1   |
| Uttar Pradesh | Unnao            | 83  | 3.08 | 69686 | 14128 | 887.85  |
| Uttar Pradesh | Varanasi         | 90  | 2.32 | 86266 | 14974 | 921.53  |



Add -- comments on top of the SQL statement to display a title

```
select * from key_indicative_sub_table where state_name = 'Uttar Pradesh';
```

```
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Cumulative CPU: 3.9 sec HDFS Read: 20228 HDFS Write: 3983 SUCCESS
INFO : Total MapReduce CPU Time Spent: 3 seconds 900 msec
INFO : Completed executing command(queryId=hive_20190820162525_d120443f-8de5-4c4f-ac9c-898b0a4aa48b); Time taken: 13.764 seconds
INFO : OK
```

job\_1566314040237\_0007

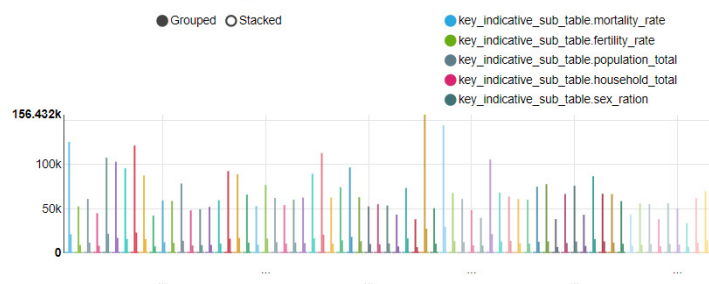
X-AXIS  
key\_indicative\_sub\_table.popul...

Y-AXIS  
☒ key\_indicative\_sub\_table.mortality\_...  
☒ key\_indicative\_sub\_table.fertility\_ra...  
☒ key\_indicative\_sub\_table.population...  
☒ key\_indicative\_sub\_table.household...  
☒ key\_indicative\_sub\_table.sex\_ration...

GROUP  
Choose a column to pivot...

LIMIT  
Limit the number of results to...

SORTING



**b. For ORC Format:**

```
hive> Select count(*)
      From key_indicative_orc_sub_table;
```

 Add a name... Add a description...   

22.64s  default  text   

```
1|select count(*) from key_indicative_orc_sub_table;
```

```
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.1 sec HDFS Read: 24887 HDFS Write: 4 SUCCESS
INFO : Total MapReduce CPU Time Spent: 6 seconds 100 msec
INFO : Completed executing command(queryId=hive_20190820162929_dc67d54f-b6b3-47a0-9f68-d39750f8d4f6); Time taken: 20.48 seconds
INFO : OK
```

Query History  

Saved Queries 

Results (1)  

|   | _c0 |
|---|-----|
| 1 | 284 |



```
hive> Select state_name, count(*)
      From key_indicative_orc_sub_table
      Group by state_name;
```



Add -- comments on top of the SQL statement to display a title

```
select state_name, count(*) from key_indicative_orc_sub_table group by state_name;
```

```
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 5.87 sec HDFS Read: 25972 HDFS Write: 120 SUCCESS
INFO : Total MapReduce CPU Time Spent: 5 seconds 870 msec
INFO : Completed executing command(queryId=hive_20190820163232_6fdb2691-1e1c-407b-8946-14ddf06af698); Time taken: 20.431 seconds
INFO : OK
```

|   | state_name     | _c1 |
|---|----------------|-----|
| 1 | Assam          | 23  |
| 2 | Bihar          | 37  |
| 3 | Chhattisgarh   | 16  |
| 4 | Jharkhand      | 18  |
| 5 | Madhya Pradesh | 45  |
| 6 | Odisha         | 30  |
| 7 | Rajasthan      | 32  |
| 8 | Uttar Pradesh  | 70  |
| 9 | Uttarakhand    | 13  |



Add -- comments on top of the SQL statement to display a title

```
select state_name, count(*) from key_indicative_orc_sub_table group by state_name;
```

```
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 5.87 sec HDFS Read: 25972 HDFS Write: 120 SUCCESS
INFO : Total MapReduce CPU Time Spent: 5 seconds 870 msec
INFO : Completed executing command(queryId=hive_20190820163232_6fdb2691-1e1c-407b-8946-14ddf06af698); Time taken: 20.431 seconds
INFO : OK
```

job\_1566314040237\_0011

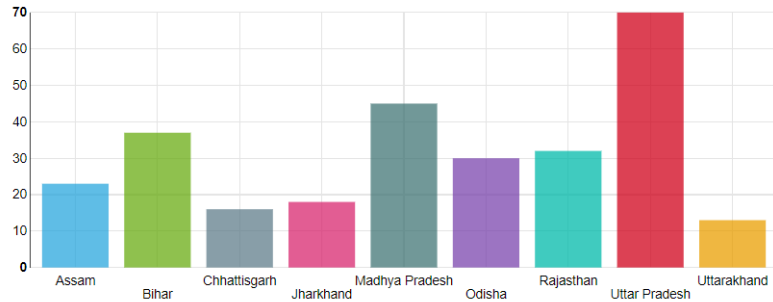
X-AXIS  
state\_name

Y-AXIS  
☒ \_c1

GROUP  
Choose a column to pivot...

LIMIT  
Limit the number of results to...

SORTING



```
hive> Select *
From key_indicative_orc_sub_table
Where state_name = 'Uttar Pradesh';
```

| key_indicative_orc_sub_table.state_name | key_indicative_orc_sub_table.state_district_name | key_indicative_orc_sub_table.mortality_rate | key_indicative_orc_sub_table.fertility_rate | key_indicative_orc_sub_table.population_total | key_indicative_orc_sub_table.household_total | key_indicative_orc_sub_table.sex_ratio |
|---|--|---|---|---|--|--|
| Uttar Pradesh                           | Agra   | 69  | 3.02  | 125614  | 20911  | 873.47                                 |
| Uttar Pradesh                           | Aligarh  | 90  | 3.53  | 52583   | 8844   | 910.76                                 |
| Uttar Pradesh                           | Allahabad  | 104   | 3.16  | 61029   | 11563  | 1016.34                                |
| Uttar Pradesh                           | Ambedkar Nagar                                   | 78  | 3.03  | 44698   | 7923   | 1114.48                                |
| Uttar Pradesh                           | Auraiya  | 84  | 3.47  | 107619  | 21590  | 875.68                                 |
| Uttar Pradesh                           | Azamgarh   | 89  | 3.15  | 103165  | 16962  | 1104.91                                |
| Uttar Pradesh                           | Baghpat  | 70  | 3.03  | 95759   | 15648  | 859.29                                 |
| Uttar Pradesh                           | Bahraich   | 105   | 4.87  | 121402  | 22906  | 896.37                                 |
| Uttar Pradesh                           | Ballia   | 82  | 2.97  | 87623   | 15606  | 992.82                                 |
| Uttar Pradesh                           | Balrampur  | 117   | 4.94  | 42016   | 7315   | 1040.09                                |
| Uttar Pradesh                           | Banda  | 96  | 4.13  | 59266   | 11915  | 925.05                                 |
| Uttar Pradesh                           | Barabanki  | 97  | 3.85  | 58722   | 11232  | 895.18                                 |
| Uttar Pradesh                           | Bareilly   | 104   | 3.64  | 78492   | 13678  | 887.13                                 |
| Uttar Pradesh                           | Basti  | 106   | 3.47  | 48055   | 8393   | 1067.67                                |
| Uttar Pradesh                           | Bijnor   | 79  | 3.23  | 49416   | 8748   | 963.34                                 |
| Uttar Pradesh                           | Budaun   | 108   | 4.48  | 51993   | 8999   | 915.88                                 |
| Uttar Pradesh                           | Bulandshahar                                     | 89  | 3.44  | 59473   | 10578  | 912                                    |
| Uttar Pradesh                           | Chandauli  | 98  | 3.29  | 92389   | 15936  | 993.76                                 |
| Uttar Pradesh                           | Chitrakoot                                       | 119   | 3.6   | 88832   | 16937  | 910.69                                 |
| Uttar Pradesh                           | Deoria   | 83  | 3.12  | 65914   | 11641  | 1171.6                                 |
| Uttar Pradesh                           | Etah   | 86  | 4.16  | 52944   | 9054   | 884.45                                 |
| Uttar Pradesh                           | Etawah   | 85  | 3.06  | 76793   | 16067  | 857.88                                 |
| Uttar Pradesh                           | Faizabad   | 115   | 3.02  | 62219   | 12075  | 1016.34                                |

|               |                  |     |      |        |       |         |
|---------------|------------------|-----|------|--------|-------|---------|
| Uttar Pradesh | Farrukhabad      | 98  | 3.68 | 54111  | 10364 | 869.08  |
| Uttar Pradesh | Fatehpur         | 81  | 3.46 | 60209  | 11582 | 919.64  |
| Uttar Pradesh | Firozabad        | 79  | 3.57 | 62573  | 11053 | 899.61  |
| Uttar Pradesh | Gautam Buddha    |     |      |        |       |         |
| Uttar Pradesh | Nagar            | 70  | 2.64 | 89498  | 16323 | 836.82  |
| Uttar Pradesh | Ghaziabad        | 59  | 2.54 | 112985 | 20612 | 862.85  |
| Uttar Pradesh | Ghazipur         | 94  | 2.97 | 62521  | 10337 | 1064.96 |
| Uttar Pradesh | Gonda            | 97  | 4.01 | 74324  | 14169 | 906.07  |
| Uttar Pradesh | Gorakhpur        | 76  | 2.72 | 96497  | 17975 | 1073.8  |
| Uttar Pradesh | Hamirpur         | 66  | 3.57 | 62783  | 13042 | 862.22  |
| Uttar Pradesh | Hardoi           | 118 | 4.23 | 52567  | 10040 | 877.61  |
| Uttar Pradesh | Hathras          | 78  | 3.2  | 55062  | 9779  | 868.83  |
| Uttar Pradesh | Jalaun           | 97  | 3.1  | 53505  | 10675 | 880.57  |
| Uttar Pradesh | Jaunpur          | 91  | 2.87 | 43285  | 7272  | 1037.06 |
| Uttar Pradesh | Jhansi           | 59  | 2.3  | 73590  | 16295 | 875.12  |
| Uttar Pradesh | Jyotiba Phule    |     |      |        |       |         |
| Uttar Pradesh | Nagar            | 92  | 3.51 | 37927  | 6546  | 930.23  |
| Uttar Pradesh | Kannauj          | 102 | 3.28 | 156432 | 27431 | 893.92  |
| Uttar Pradesh | Kanpur Dehat     | 94  | 2.84 | 50626  | 10543 | 873.47  |
| Uttar Pradesh | Kanpur Nagar     | 50  | 2.11 | 144182 | 29525 | 875.09  |
| Uttar Pradesh | Kaushambi        | 113 | 3.89 | 67572  | 13179 | 1032.4  |
| Uttar Pradesh | Kheri            | 117 | 3.88 | 60900  | 12004 | 888.43  |
| Uttar Pradesh | Kushinagar       | 99  | 3.33 | 48371  | 8608  | 1136.58 |
| Uttar Pradesh | Lalitpur         | 114 | 3.4  | 39529  | 8108  | 889.05  |
| Uttar Pradesh | Lucknow          | 58  | 2.23 | 105538 | 21138 | 898.35  |
| Uttar Pradesh | Maharajganj      | 96  | 3.23 | 68263  | 12950 | 1133.13 |
| Uttar Pradesh | Mahoba           | 73  | 3.55 | 63537  | 13461 | 887.27  |
| Uttar Pradesh | Mainpuri         | 78  | 3.37 | 60823  | 10727 | 885.2   |
| Uttar Pradesh | Mathura          | 58  | 2.98 | 59930  | 10406 | 876.42  |
| Uttar Pradesh | Mau              | 86  | 2.86 | 74750  | 12606 | 1038.26 |
| Uttar Pradesh | Meerut           | 59  | 3.07 | 77688  | 12884 | 900.55  |
| Uttar Pradesh | Mirzapur         | 105 | 2.57 | 38180  | 6709  | 962.7   |
| Uttar Pradesh | Moradabad        | 80  | 3.61 | 66632  | 11054 | 902.28  |
| Uttar Pradesh | Muzaffarnagar    | 71  | 3.22 | 75749  | 12812 | 888.14  |
| Uttar Pradesh | Pilibhit         | 91  | 3.56 | 43038  | 7773  | 880.49  |
| Uttar Pradesh | Pratapgarh       | 104 | 2.9  | 86770  | 15695 | 1142.93 |
| Uttar Pradesh | Rae Bareli       | 80  | 3.29 | 66935  | 12981 | 946.64  |
| Uttar Pradesh | Rampur           | 86  | 3.48 | 66460  | 11435 | 904.74  |
| Uttar Pradesh | Saharanpur       | 99  | 3.31 | 58510  | 10259 | 919.02  |
| Uttar Pradesh | Sant Kabir Nagar | 91  | 3.84 | 43549  | 8028  | 1174.95 |
| Uttar Pradesh | Sant Ravidas     |     |      |        |       |         |
| Uttar Pradesh | Nagar (Bhadohi)  | 106 | 2.88 | 55736  | 8974  | 998.61  |
| Uttar Pradesh | Shahjahanpur     | 100 | 4.17 | 55307  | 9822  | 853.67  |
| Uttar Pradesh | Shrawasti        | 130 | 5.52 | 38131  | 7483  | 983.63  |
| Uttar Pradesh | Siddharthnagar   | 116 | 4.82 | 56238  | 9919  | 1178.11 |
| Uttar Pradesh | Sitapur          | 114 | 4.42 | 50237  | 9323  | 882.49  |
| Uttar Pradesh | Sonbhadra        | 99  | 3.78 | 33562  | 6838  | 952.06  |
| Uttar Pradesh | Sultanpur        | 66  | 3.03 | 61923  | 11251 | 984.1   |
| Uttar Pradesh | Unnao            | 83  | 3.08 | 69686  | 14128 | 887.85  |
| Uttar Pradesh | Varanasi         | 90  | 2.32 | 86266  | 14974 | 921.53  |



Add -- comments on top of the SQL statement to display a title

```
select * from key_indicative_orc_sub_table where state_name = 'Uttar Pradesh';
```

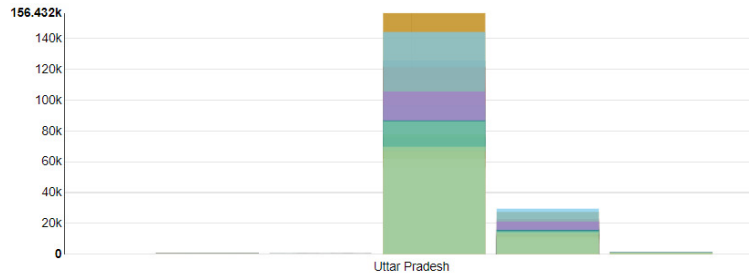
```
INFO : Compiling command(queryId=hive_20190820164040_f2c30a60-defd-4110-a3f5-399c3db61414): select * from key_indicative_orc_sub_table where state_name = 'Uttar Pradesh'
INFO : Semantic Analysis Completed
INFO : Returning Hive schema: Schema(fieldSchemas:[FieldSchema(name=key_indicative_orc_sub_table.state_name, type=varchar(100), comment=null), FieldSchema(name=key_indicative_orc_sub_table.state_district_name, type=varchar(100), comment=null), FieldSchema(name=key_indicative_orc_sub_table.mortality_rate, type=double, comment=null), FieldSchema(name=key_indicative_orc_sub_table.fertility_rate, type=double, comment=null), FieldSchema(name=key_indicative_orc_sub_table.population, type=double, comment=null), FieldSchema(name=key_indicative_orc_sub_table.household_size, type=double, comment=null), FieldSchema(name=key_indicative_orc_sub_table.sex_ratio, type=double, comment=null)], tableName=key_indicative_orc_sub_table)
```

X-AXIS  
key\_indicative\_orc\_sub\_table.s...

Y-AXIS  
☒ key\_indicative\_orc\_sub\_table.mortality\_rate  
☒ key\_indicative\_orc\_sub\_table.fertility\_rate  
☒ key\_indicative\_orc\_sub\_table.population  
☒ key\_indicative\_orc\_sub\_table.household\_size  
☒ key\_indicative\_orc\_sub\_table.sex\_ratio

GROUP  
Choose a column to pivot...

LIMIT  
Limit the number of results to...



### c. For HIVE-HBASE Integrated Format:

```
hive> Select count(*)
      From key_indicative_hbase_sub_tbl;
```

Hive interface showing the execution of a query. The query is: `Select count(*) From key_indicative_hbase_sub_tbl;`. The execution time is 27.13s. The output shows a single result: 284.

Query History | Saved Queries | Results (1)

| Query ID | Count |
|----------|-------|
| _c0      | 284   |

```
hive> Select state_name, count(*)
      From key_indicative_hbase_sub_tbl
      Group by state_name;
```



Hive

Add a name...

Add a description...

26.91s

default

text

```

1 Select state_name,count(*)
2 From key_indicative_hbase_sub_tbl
3 Group by state_name;
4

```

INFO : 2019-08-28 10:04:10,370 Stage: 1 map = 100%, reduce = 100%, cumulative CPU 6.71 sec

INFO : MapReduce Total cumulative CPU time: 6 seconds 710 msec

INFO : Ended Job = job\_1566736243324\_0004

INFO : MapReduce Jobs Launched:

INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.71 sec HDFS Read: 17655 HDFS Write: 120 SUCCESS

INFO : Total MapReduce CPU Time Spent: 6 seconds 710 msec

INFO : Completed executing command(queryId=hive\_20190825153333\_aac7bba0-18ee-4dcd-a21d-a1c125c98903); Time taken: 24.61 seconds

INFO : OK

job\_1566736243324\_0004

Query History

Saved Queries

Results (9)

|   | state_name     | _c1 |
|---|----------------|-----|
| 1 | Assam          | 23  |
| 2 | Bihar          | 37  |
| 3 | Chhattisgarh   | 16  |
| 4 | Jharkhand      | 18  |
| 5 | Madhya Pradesh | 45  |
| 6 | Odisha         | 30  |

```

hive> Select *
From key_indicative_hbase_sub_tbl
Where state_name = 'Uttar Pradesh';

```

| key_indicative_orc_sub_table.state_name | key_indicative_orc_sub_table.state_district_name | key_indicative_orc_sub_table.mortality_rate | key_indicative_orc_sub_table.fertility_rate | key_indicative_orc_sub_table.population_total | key_indicative_orc_sub_table.household_total | key_indicative_orc_sub_table.sex_ratio |
|---|--|---|---|---|--|--|
| Uttar Pradesh                           | Agra   | 69  | 3.02  | 125614  | 20911  | 873.47                                 |
| Uttar Pradesh                           | Aligarh  | 90  | 3.53  | 52583   | 8844   | 910.76                                 |
| Uttar Pradesh                           | Allahabad  | 104   | 3.16  | 61029   | 11563  | 1016.34                                |
| Uttar Pradesh                           | Ambedkar Nagar                                   | 78  | 3.03  | 44698   | 7923   | 1114.48                                |
| Uttar Pradesh                           | Auraiya  | 84  | 3.47  | 107619  | 21590  | 875.68                                 |
| Uttar Pradesh                           | Azamgarh   | 89  | 3.15  | 103165  | 16962  | 1104.91                                |
| Uttar Pradesh                           | Baghpat  | 70  | 3.03  | 95759   | 15648  | 859.29                                 |
| Uttar Pradesh                           | Bahraich   | 105   | 4.87  | 121402  | 22906  | 896.37                                 |
| Uttar Pradesh                           | Ballia   | 82  | 2.97  | 87623   | 15606  | 992.82                                 |
| Uttar Pradesh                           | Balrampur  | 117   | 4.94  | 42016   | 7315   | 1040.09                                |
| Uttar Pradesh                           | Banda  | 96  | 4.13  | 59266   | 11915  | 925.05                                 |
| Uttar Pradesh                           | Barabanki  | 97  | 3.85  | 58722   | 11232  | 895.18                                 |
| Uttar Pradesh                           | Bareilly   | 104   | 3.64  | 78492   | 13678  | 887.13                                 |
| Uttar Pradesh                           | Basti  | 106   | 3.47  | 48055   | 8393   | 1067.67                                |
| Uttar Pradesh                           | Bijnor   | 79  | 3.23  | 49416   | 8748   | 963.34                                 |
| Uttar Pradesh                           | Budaun   | 108   | 4.48  | 51993   | 8999   | 915.88                                 |
| Uttar Pradesh                           | Bulandshahar                                     | 89  | 3.44  | 59473   | 10578  | 912                                    |
| Uttar Pradesh                           | Chandauli  | 98  | 3.29  | 92389   | 15936  | 993.76                                 |
| Uttar Pradesh                           | Chitrakoot                                       | 119   | 3.6   | 88832   | 16937  | 910.69                                 |

|               |                              |     |      |        |       |         |
|---------------|------------------------------|-----|------|--------|-------|---------|
| Uttar Pradesh | Deoria                       | 83  | 3.12 | 65914  | 11641 | 1171.6  |
| Uttar Pradesh | Etah                         | 86  | 4.16 | 52944  | 9054  | 884.45  |
| Uttar Pradesh | Etawah                       | 85  | 3.06 | 76793  | 16067 | 857.88  |
| Uttar Pradesh | Faizabad                     | 115 | 3.02 | 62219  | 12075 | 1016.34 |
| Uttar Pradesh | Farrukhabad                  | 98  | 3.68 | 54111  | 10364 | 869.08  |
| Uttar Pradesh | Fatehpur                     | 81  | 3.46 | 60209  | 11582 | 919.64  |
| Uttar Pradesh | Firozabad                    | 79  | 3.57 | 62573  | 11053 | 899.61  |
| Uttar Pradesh | Gautam Buddha Nagar          | 70  | 2.64 | 89498  | 16323 | 836.82  |
| Uttar Pradesh | Ghaziabad                    | 59  | 2.54 | 112985 | 20612 | 862.85  |
| Uttar Pradesh | Ghazipur                     | 94  | 2.97 | 62521  | 10337 | 1064.96 |
| Uttar Pradesh | Gonda                        | 97  | 4.01 | 74324  | 14169 | 906.07  |
| Uttar Pradesh | Gorakhpur                    | 76  | 2.72 | 96497  | 17975 | 1073.8  |
| Uttar Pradesh | Hamirpur                     | 66  | 3.57 | 62783  | 13042 | 862.22  |
| Uttar Pradesh | Hardoi                       | 118 | 4.23 | 52567  | 10040 | 877.61  |
| Uttar Pradesh | Hathras                      | 78  | 3.2  | 55062  | 9779  | 868.83  |
| Uttar Pradesh | Jalaun                       | 97  | 3.1  | 53505  | 10675 | 880.57  |
| Uttar Pradesh | Jaunpur                      | 91  | 2.87 | 43285  | 7272  | 1037.06 |
| Uttar Pradesh | Jhansi                       | 59  | 2.3  | 73590  | 16295 | 875.12  |
| Uttar Pradesh | Jyotiba Phule Nagar          | 92  | 3.51 | 37927  | 6546  | 930.23  |
| Uttar Pradesh | Kannauj                      | 102 | 3.28 | 156432 | 27431 | 893.92  |
| Uttar Pradesh | Kanpur Dehat                 | 94  | 2.84 | 50626  | 10543 | 873.47  |
| Uttar Pradesh | Kanpur Nagar                 | 50  | 2.11 | 144182 | 29525 | 875.09  |
| Uttar Pradesh | Kaushambi                    | 113 | 3.89 | 67572  | 13179 | 1032.4  |
| Uttar Pradesh | Kheri                        | 117 | 3.88 | 60900  | 12004 | 888.43  |
| Uttar Pradesh | Kushinagar                   | 99  | 3.33 | 48371  | 8608  | 1136.58 |
| Uttar Pradesh | Lalitpur                     | 114 | 3.4  | 39529  | 8108  | 889.05  |
| Uttar Pradesh | Lucknow                      | 58  | 2.23 | 105538 | 21138 | 898.35  |
| Uttar Pradesh | Maharajganj                  | 96  | 3.23 | 68263  | 12950 | 1133.13 |
| Uttar Pradesh | Mahoba                       | 73  | 3.55 | 63537  | 13461 | 887.27  |
| Uttar Pradesh | Mainpuri                     | 78  | 3.37 | 60823  | 10727 | 885.2   |
| Uttar Pradesh | Mathura                      | 58  | 2.98 | 59930  | 10406 | 876.42  |
| Uttar Pradesh | Mau                          | 86  | 2.86 | 74750  | 12606 | 1038.26 |
| Uttar Pradesh | Meerut                       | 59  | 3.07 | 77688  | 12884 | 900.55  |
| Uttar Pradesh | Mirzapur                     | 105 | 2.57 | 38180  | 6709  | 962.7   |
| Uttar Pradesh | Moradabad                    | 80  | 3.61 | 66632  | 11054 | 902.28  |
| Uttar Pradesh | Muzaffarnagar                | 71  | 3.22 | 75749  | 12812 | 888.14  |
| Uttar Pradesh | Pilibhit                     | 91  | 3.56 | 43038  | 7773  | 880.49  |
| Uttar Pradesh | Pratapgarh                   | 104 | 2.9  | 86770  | 15695 | 1142.93 |
| Uttar Pradesh | Rae Bareli                   | 80  | 3.29 | 66935  | 12981 | 946.64  |
| Uttar Pradesh | Rampur                       | 86  | 3.48 | 66460  | 11435 | 904.74  |
| Uttar Pradesh | Saharanpur                   | 99  | 3.31 | 58510  | 10259 | 919.02  |
| Uttar Pradesh | Sant Kabir Nagar             | 91  | 3.84 | 43549  | 8028  | 1174.95 |
| Uttar Pradesh | Sant Ravidas Nagar (Bhadohi) | 106 | 2.88 | 55736  | 8974  | 998.61  |
| Uttar Pradesh | Shahjahanpur                 | 100 | 4.17 | 55307  | 9822  | 853.67  |
| Uttar Pradesh | Shrawasti                    | 130 | 5.52 | 38131  | 7483  | 983.63  |
| Uttar Pradesh | Siddharthnagar               | 116 | 4.82 | 56238  | 9919  | 1178.11 |
| Uttar Pradesh | Sitapur                      | 114 | 4.42 | 50237  | 9323  | 882.49  |
| Uttar Pradesh | Sonbhadra                    | 99  | 3.78 | 33562  | 6838  | 952.06  |

|               |           |    |      |       |       |        |
|---------------|-----------|----|------|-------|-------|--------|
| Uttar Pradesh | Sultanpur | 66 | 3.03 | 61923 | 11251 | 984.1  |
| Uttar Pradesh | Unnao     | 83 | 3.08 | 69686 | 14128 | 887.85 |
| Uttar Pradesh | Varanasi  | 90 | 2.32 | 86266 | 14974 | 921.53 |

Add a name... Add a description...

21.71s
default
text
?

```

1 Select *
2 From key_indicative_hbase_sub_tbl
3 Where state_name = 'Uttar Pradesh';
4
5

```

INFO : MapReduce Total cumulative CPU time: 5 seconds 220 msec

INFO : Ended Job = job\_1566736243324\_0005

INFO : MapReduce Jobs Launched:

INFO : Stage-Stage-1: Map: 1 Cumulative CPU: 5.22 sec HDFS Read: 13952 HDFS Write: 4263 SUCCESS

INFO : Total MapReduce CPU Time Spent: 5 seconds 220 msec

INFO : Completed executing command(queryId=hive\_20190825153535\_f874e3f7-7219-4ca2-b437-1811fc3d14f5); Time taken: 18.877 seconds

INFO : OK

job\_1566736243324\_0005

Query History
Saved Queries
Results (70)

|   | key_indicative_hbase_sub_tbl.id | key_indicative_hbase_sub_tbl.state_name | key_indicative_hbase_sub_tbl.state_district_name | key_in |
|---|---------------------------------|---|--|--------|
| 1 | 202                             | Uttar Pradesh                           | Agra   | 69     |
| 2 | 203                             | Uttar Pradesh                           | Aligarh  | 90     |
| 3 | 204                             | Uttar Pradesh                           | Allahabad  | 104    |
| 4 | 205                             | Uttar Pradesh                           | Ambedkar Nagar                                   | 78     |

9. Create and insert command for the partition table for analyses 1 & 2. The partition table should be created using the table created above. This step to be done for the Hive only table.

```

Create table key_indicator_orc_sub_part_table (
state_district_name string,
mortality_rate DOUBLE,
fertility_rate DOUBLE,
population_total DOUBLE,
household_total DOUBLE,
sex_ratio DOUBLE)
partitioned by (state_name string)
STORED AS ORC
LOCATION '/user/hive/orc/'
TBLPROPERTIES ("orc.compress"="SNAPPY");

```

Execute below command in hive.

```
set hive.exec.dynamic.partition.mode=nonstrict;
```

```

Insert into table key_indicator_orc_sub_part_table
partition (state_name)
select state_district_name,
mortality_rate,
fertility_rate,
population_total,
household_total,
sex_ration,
state_name
From key_indicative_orc_sub_table;

```

Hive Add a name... Add a description... 17.77s default text ?

```

1 insert into table key_indicator_orc_sub_part_table
2 partition (state_name)
3 select state_district_name,
4 mortality_rate,
5 fertility_rate,
6 population_total,
7 household_total,
8 sex_ratio,
9 state_name
10 from key_indicative_orc_sub_table;

```

INFO : MapReduce Jobs Launched:  
 INFO : Stage-Stage-1: Map: 1 Cumulative CPU: 4.43 sec HDFS Read: 23481 HDFS Write: 18134 SUCCESS [job\\_1566314040237\\_0015](#)  
 INFO : Total MapReduce CPU Time Spent: 4 seconds 438 msec  
 INFO : Completed executing command(queryId=hive\_20190820164949\_2d363a9c-12e9-450e-af5e-3cd8353b0e48); Time taken: 16.689 seconds  
 INFO : OK

✓ Success.

1. The child mortality rate of Uttar Pradesh (screen shot of the result)  
 State wise child mortality rate:  
**Select state\_name, AVG(mortality\_rate) as mortality\_rate**  
**From key\_indicator\_orc\_sub\_part\_table**  
**Group by state\_name;**

Hive Add a name... Add a description... 25.50s default text ?

```

1 select state_name, AVG(mortality_rate) as mortality_rate
2 from key_indicator_orc_sub_part_table
3 group by state_name;

```

INFO : MapReduce Total cumulative CPU time: 5 seconds 870 msec  
 INFO : Ended Job = job\_1566314040237\_0016 [job\\_1566314040237\\_0016](#)  
 INFO : MapReduce Jobs Launched:  
 INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 5.87 sec HDFS Read: 39492 HDFS Write: 219 SUCCESS  
 INFO : Total MapReduce CPU Time Spent: 5 seconds 870 msec  
 INFO : Completed executing command(queryId=hive\_20190820165151\_4f41a810-85e4-41e4-b0e2-3e4f9ca09540); Time taken: 21.494 seconds

Query History Q ? Saved Queries Q Results (9) Q ?

|   | state_name     | mortality_rate    |
|---|----------------|-------------------|
| 1 | Assam          | 71.43478260869566 |
| 2 | Bihar          | 69.62162162162163 |
| 3 | Chhattisgarh   | 62.5              |
| 4 | Jharkhand      | 53.44444444444444 |
| 5 | Madhya Pradesh | 83.37777777777778 |
| 6 | Odisha         | 75.8              |
| 7 | Rajasthan      | 75.0625           |
| 8 | Uttar Pradesh  | 90.22857142857143 |
| 9 | Uttarakhand    | 41.84615384615385 |



Add -- comments on top of the SQL statement to display a title

```
select state_name, AVG(mortality_rate) as mortality_rate
from key_indicator_orc_sub_part_table
group by state_name;
```

```
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.55 sec HDFS Read: 39492 HDFS Write: 219 SUCCESS
INFO : Total MapReduce CPU Time Spent: 6 seconds 550 msec
INFO : Completed executing command(queryId=hive_20190820165252_d1a37fec-5687-4fa6-a298-15a1f331ef33); Time taken: 24.58 seconds
INFO : OK
```

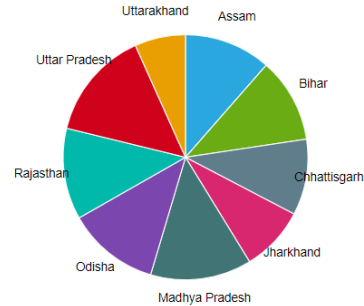
[job\\_1566314040237\\_](#)

VALUE  
mortality\_rate

LEGEND  
state\_name

LIMIT  
Limit the number of results to...

SORTING



Select state\_name, AVG(mortality\_rate) as mortality\_rate  
From key\_indicative\_hbase\_sub\_tbl  
Group by state\_name;

Hive

Add a name... Add a description...

29.5s default text ?

```
1 Select state_name, AVG(mortality_rate) as mortality_rate
2 From key_indicative_hbase_sub_tbl
3 Group by state_name;
4
```

INFO : MapReduce Total cumulative CPU time: 7 seconds 860 msec  
INFO : Ended Job = job\_1566736243324\_0008  
INFO : MapReduce Jobs Launched:  
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 7.86 sec HDFS Read: 17995 HDFS Write: 219 SUCCESS  
INFO : Total MapReduce CPU Time Spent: 7 seconds 860 msec  
INFO : Completed executing command(queryId=hive\_20190825160404\_9abcec42-1eb5-4019-ac7e-62b77708f537); Time taken: 27.799 seconds  
INFO : OK

[job\\_1566736243324\\_0008](#)

Query History Saved Queries Results (9)

COLUMNS (3)

- state\_name varchar
- mortality\_rate double

|   | state_name     | mortality_rate     |
|---|----------------|--------------------|
| 1 | Assam          | 71.43478260869566  |
| 2 | Bihar          | 69.62162162162163  |
| 3 | Chhattisgarh   | 62.5               |
| 4 | Jharkhand      | 53.444444444444444 |
| 5 | Madhya Pradesh | 83.37777777777778  |
| 6 | Odisha         | 75.8               |

## 2. State wise Fertility:

Select state\_Name, AVG(fertility\_rate) as fertility\_rate  
From key\_indicative\_orc\_sub\_part\_table  
Group by State\_Name;

Hive

Add a name...

Add a description...

25.50s

default

text

1

```

1 select state_Name, AVG(fertility_rate) as fertility_rate
2 from key_indicator_orc_sub_part_Table
3 group by State_Name;

```

```

INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.18 sec HDFS Read: 39674 HDFS Write: 210 SUCCESS
INFO : Total MapReduce CPU Time Spent: 6 seconds 180 msec
INFO : Completed executing command(queryId=hive_20190820165454_aee3c723-09aa-4dda-b952-d179d6911e98); Time taken: 21.72 seconds
INFO : OK

```

Query History

Saved Queries

Results (9)

|   | state_name     | fertility_rate     |
|---|----------------|--------------------|
| 1 | Assam          | 2.4                |
| 2 | Bihar          | 3.532432432432432  |
| 3 | Chhattisgarh   | 2.70125            |
| 4 | Jharkhand      | 2.894444444444445  |
| 5 | Madhya Pradesh | 3.031111111111111  |
| 6 | Odisha         | 2.28               |
| 7 | Rajasthan      | 3.028125           |
| 8 | Uttar Pradesh  | 3.3978571428571427 |
| 9 | Uttarakhand    | 2.022307692307692  |

Add -- comments on top of the SQL statement to display a title

```

select state_Name, AVG(fertility_rate) as fertility_rate
from key_indicator_orc_sub_part_Table
group by State_Name;

```

```

INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.08 sec HDFS Read: 39688 HDFS Write: 210 SUCCESS
INFO : Total MapReduce CPU Time Spent: 6 seconds 80 msec
INFO : Completed executing command(queryId=hive_20190820165555_07fa3900-625c-4340-adf5-ebef95ab5b3e); Time taken: 21.828 seconds
INFO : OK

```

VALUE

fertility\_rate

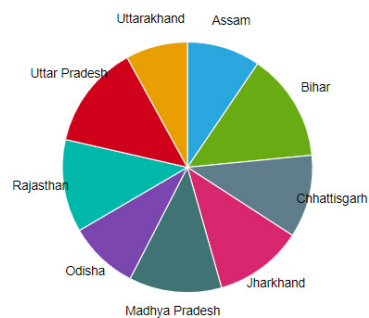
LEGEND

state\_name

LIMIT

Limit the number of results to...

SORTING



```

Select state_Name, AVG(fertility_rate) as fertility_rate
From key_indicative_hbase_sub_tbl
Group by State_Name;

```

Hive Add a name... Add a description... 27.1s default text ?

```

1 select state_Name, AVG(fertility_rate) as fertility_rate
2 From key_indicative_hbase_sub_tbl
3 Group by State_Name;
4
5

```

INFO : 2019-08-29 10:00:05,000 Stage-1: map = 100%, reduce = 100%, Cumulative CPU 6.27 sec  
 INFO : MapReduce Total cumulative CPU time: 6 seconds 270 msec job\_1566736243324\_0009  
 INFO : Ended Job = job\_1566736243324\_0009  
 INFO : MapReduce Jobs Launched:  
 INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.27 sec HDFS Read: 17995 HDFS Write: 225 SUCCESS  
 INFO : Total MapReduce CPU Time Spent: 6 seconds 270 msec  
 INFO : Completed executing command(queryId=hive\_20190825160505\_48b3aa81-3851-4444-abbf-a6ed9106132a); Time taken: 25.647 seconds  
 INFO : OK

Query History Q 📅 Saved Queries Q Results (9) Q 🔍

**COLUMNS (3) Q**

| state_name       | fertility_rate     |
|------------------|--------------------|
| 1 Assam          | 2.3999999999999995 |
| 2 Bihar          | 3.532432432432432  |
| 3 Chhattisgarh   | 2.70125            |
| 4 Jharkhand      | 2.8944444444444445 |
| 5 Madhya Pradesh | 3.0311111111111112 |
| 6 Odisha         | 2.28               |

3. Does high fertility correlate with high child mortality:  
 Select state\_Name, corr(fertility\_rate, mortality\_rate) as correlate  
 From key\_indicative\_orc\_sub\_table  
 Group by state\_Name;

Hive Add a name... Add a description... 23s default te

```

1 select state_Name, corr(fertility_rate, mortality_rate) as correlate
2 from key_indicative_orc_sub_table
3 group by state_Name;

```

INFO : MapReduce Jobs Launched:  
 INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.61 sec HDFS Read: 26134 HDFS Write: 264 SUCCESS job\_156631404023  
 INFO : Total MapReduce CPU Time Spent: 6 seconds 610 msec  
 INFO : Completed executing command(queryId=hive\_20190820165757\_9872cd47-0fc4-4e84-bbb8-4d0e447e873a); Time taken: 20.655 seconds  
 INFO : OK

Query History Q 📅 Saved Queries Q Results (9) Q 🔍

| state_name       | correlate          |
|------------------|--------------------|
| 1 Assam          | 0.3915829744764518 |
| 2 Bihar          | 0.7233339695538527 |
| 3 Chhattisgarh   | 0.4551421203097001 |
| 4 Jharkhand      | 0.7936967288511909 |
| 5 Madhya Pradesh | 0.7051529438563544 |
| 6 Odisha         | 0.3116788576691367 |
| 7 Rajasthan      | 0.5992209550552275 |
| 8 Uttar Pradesh  | 0.6297529969287118 |
| 9 Uttarakhand    | 0.8430609600364916 |



Add -- comments on top of the SQL statement to display a title

```
select state_Name, corr(fertility_rate, mortality_rate) as correlate
from key_indicative_orc_sub_table
group by state_Name;
```

```
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 6.39 sec HDFS Read: 26134 HDFS Write: 264 SUCCESS
INFO : Total MapReduce CPU Time Spent: 6 seconds 390 msec
INFO : Completed executing command(queryId=hive_20190820170303_12a171c7-6b64-48dd-95a5-3ed88444be85); Time taken: 21.233 seconds
INFO : OK
```

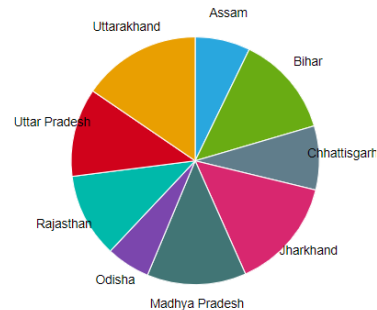
[job\\_15663140402](#)

VALUE  
correlate

LEGEND  
state\_name

LIMIT  
Limit the number of results to...

SORTING



Select state\_Name, corr(fertility\_rate, mortality\_rate) as correlate  
From key\_indicative\_hbase\_sub\_tbl  
Group by state\_Name;



Add a name... Add a description...



25.51s default text ?

```
1 select state_Name, corr(fertility_rate, mortality_rate) as correlate
2 From key_indicative_hbase_sub_tbl
3 Group by state_Name;
4
5
6
```



```
INFO : 2019-08-20 10:10:02,705 Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 7.2 sec
INFO : MapReduce Total cumulative CPU time: 7 seconds 200 msec
INFO : Ended Job = job_1566736243324_0010
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 7.2 sec HDFS Read: 18305 HDFS Write: 265 SUCCESS
INFO : Total MapReduce CPU Time Spent: 7 seconds 200 msec
INFO : Completed executing command(queryId=hive_20190825161616_5e7c3e8a-ae8c-4edf-9338-4532c22337d1); Time taken: 24.426 seconds
INFO : OK
```

[job\\_1566736243324\\_0010](#)

Query History



Saved Queries



Results (9)



COLUMNS (3)



state\_name varchar



correlate double



state\_name

correlate

|   |                |                     |
|---|----------------|---------------------|
| 1 | Assam          | 0.39158297447645185 |
| 2 | Bihar          | 0.7233339695538527  |
| 3 | Chhattisgarh   | 0.4551421203097001  |
| 4 | Jharkhand      | 0.7936967288511909  |
| 5 | Madhya Pradesh | 0.7051529438563545  |
| 6 | Odisha         | 0.3116788576691367  |



4. Find top 2 districts per state with the highest population per household:

```
Select * from
    (Select
        state_name,
        state_district_name,
        population_total/household_total as
        popuplation_per_household,
        rank() OVER (PARTITION BY State_Name order by
            (population_total/household_total) desc) as rank
        From key_indicative_orc_sub_table)a
Where a.rank IN (1,2);
```

| a.state_name   | a.state_district_name        | a.popuplation_per_household | a.rank |
|----------------|------------------------------|-----------------------------|--------|
| Assam          | Dhemaji                      | 5.210344589                 | 1      |
| Assam          | Marigaon                     | 4.978445126                 | 2      |
| Bihar          | Gopalganj                    | 5.979195302                 | 1      |
| Bihar          | Nawada                       | 5.944978455                 | 2      |
| Chhattisgarh   | Durg                         | 4.716408017                 | 1      |
| Chhattisgarh   | Rajnandgaon                  | 4.651162791                 | 2      |
| Jharkhand      | Kodarma                      | 5.868167463                 | 1      |
| Jharkhand      | Giridih                      | 5.787106965                 | 2      |
| Madhya Pradesh | Jhabua                       | 5.590392501                 | 1      |
| Madhya Pradesh | Sehore                       | 5.366774132                 | 2      |
| Odisha         | Bhadrak                      | 4.765950743                 | 1      |
| Odisha         | Jajapur                      | 4.494145868                 | 2      |
| Rajasthan      | Dhaulpur                     | 5.810972222                 | 1      |
| Rajasthan      | Barmer                       | 5.629192111                 | 2      |
| Uttar Pradesh  | Sant Ravidas Nagar (Bhadohi) | 6.21083129                  | 1      |
| Uttar Pradesh  | Baghpat                      | 6.119567996                 | 2      |
| Uttarakhand    | Udham Singh Nagar            | 5.11645329                  | 1      |
| Uttarakhand    | Nainital                     | 4.74891366                  | 2      |

Add a name...
Add a description...

21.84s

default

text

?

```

1 Select * from
2 (Select
3   state_name,
4   state_district_name,
5   population_total/household_total as      population_per_household,
6   rank() OVER (PARTITION BY State_Name order by
7     (population_total/household_total) desc) as rank
8 From key_indicative_orc_sub_table)a
9 Where a.rank IN (1,2);

```

```

INFO : 2019-06-20 12:00:04,271 Stage:1 map = 100%, reduce = 100%, cumulative CPU 0.04 sec
INFO : MapReduce Total cumulative CPU time: 8 seconds 840 msec
INFO : Ended Job = job_1566736243324_0006
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 8.84 sec HDFS Read: 35776 HDFS Write: 725 SUCCESS
INFO : Total MapReduce CPU Time Spent: 8 seconds 840 msec
INFO : Completed executing command(queryId=hive_20190825155656_18f93cof-270a-49dd-b39d-b4067b158097); Time taken: 21.096 seconds
INFO : OK

```

job\_1566736243324\_0006

Query History
Saved Queries
Results (18)

COLUMNS (5)

☒ a.state\_name
☒ a.state\_district\_name
☒ a.population\_per\_household
☒ a.rank

|   | a.state_name | a.state_district_name | a.population_per_household | a.rank |
|---|--------------|-----------------------|----------------------------|--------|
| 1 | Assam        | Dhemaji               | 5.2103445894620535         | 1      |
| 2 | Assam        | Marigaon              | 4.978445126406547          | 2      |
| 3 | Bihar        | Gopalganj             | 5.979195301761839          | 1      |
| 4 | Bihar        | Nawada                | 5.944978455419291          | 2      |
| 5 | Chhattisgarh | Durg                  | 4.716408016844732          | 1      |
| 6 | Chhattisgarh | Rajnandgaon           | 4.651162790697675          | 2      |

```

Select * from
(Select
  state_name,
  state_district_name,
  population_total/household_total as
  population_per_household,
  rank() OVER (PARTITION BY State_Name order by
    (population_total/household_total) desc) as rank
From key_indicative_hbase_sub_tbl)a
Where a.rank IN (1,2);

```

Hive interface showing a query execution result. The query is:

```

1 Select * from
2 (Select
3   state_name,
4   state_district_name,
5   population_total/household_total as popuplation_per_household,
6   rank() OVER (PARTITION BY State_Name order by
7     (population_total/household_total) desc) as rank
8   From key_indicative_hbase_sub_tbl)a
9 Where a.rank IN (1,2);

```

The execution log shows the job completed successfully with the following details:

```

INFO : MapReduce Total cumulative CPU time: 8 seconds 530 msec
INFO : Ended Job = job_1566736243324_0011
INFO : MapReduce Jobs Launched:
INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 8.53 sec HDFS Read: 21371 HDFS Write: 725 SUCCESS
INFO : Total MapReduce CPU Time Spent: 8 seconds 530 msec
INFO : Completed executing command(queryId=hive_20190825161818_216227c1-5c9c-41e5-9878-3ac376c1e64a); Time taken: 27.483 seconds
INFO : OK

```

The results table shows the top 2 districts per state with the lowest sex ratios:

| a.state_name | a.state_district_name | a.popuplation_per_household | a.rank             |   |
|--------------|-----------------------|-----------------------------|--------------------|---|
| 1            | Assam                 | Dhemaji                     | 5.2103445894620535 | 1 |
| 2            | Assam                 | Marigaon                    | 4.978445126406547  | 2 |
| 3            | Bihar                 | Gopalganj                   | 5.979195301761839  | 1 |
| 4            | Bihar                 | Nawada                      | 5.944978455419291  | 2 |
| 5            | Chhattisgarh          | Durg                        | 4.716408016844732  | 1 |
| 6            | Chhattisgarh          | Rajnandgaon                 | 4.651162790697675  | 2 |

5. Find top 2 districts per state with the lowest sex ratios:

```

Select * from
  (Select
    state_name,
    state_district_Name,
    sex_ration,
    RANK() OVER (PARTITION BY state_name order by sex_ration)
  as rank
  From key_indicative_orc_sub_table)a
Where a.rank IN (1,2);

```

| a.state_name   | a.state_district_name        | a.popuplation_per_household | a.rank |
|----------------|------------------------------|-----------------------------|--------|
| Assam          | Dhemaji                      | 5.210344589                 | 1      |
| Assam          | Marigaon                     | 4.978445126                 | 2      |
| Bihar          | Gopalganj                    | 5.979195302                 | 1      |
| Bihar          | Nawada                       | 5.944978455                 | 2      |
| Chhattisgarh   | Durg                         | 4.716408017                 | 1      |
| Chhattisgarh   | Rajnandgaon                  | 4.651162791                 | 2      |
| Jharkhand      | Kodarma                      | 5.868167463                 | 1      |
| Jharkhand      | Giridih                      | 5.787106965                 | 2      |
| Madhya Pradesh | Jhabua                       | 5.590392501                 | 1      |
| Madhya Pradesh | Sehore                       | 5.366774132                 | 2      |
| Odisha         | Bhadrak                      | 4.765950743                 | 1      |
| Odisha         | Jajapur                      | 4.494145868                 | 2      |
| Rajasthan      | Dhaulpur                     | 5.810972222                 | 1      |
| Rajasthan      | Barmer                       | 5.629192111                 | 2      |
| Uttar Pradesh  | Sant Ravidas Nagar (Bhadohi) | 6.21083129                  | 1      |
| Uttar Pradesh  | Baghpat                      | 6.119567996                 | 2      |
| Uttarakhand    | Udham Singh Nagar            | 5.11645329                  | 1      |
| Uttarakhand    | Nainital                     | 4.74891366                  | 2      |

Hive Add a name... Add a description...

25.35s default text ?

```

1 Select * from
2 (Select
3   state_name,
4   state_district_Name,
5   sex_ratio,
6   RANK() OVER (PARTITION BY state_name order by sex_ratio) as rank
7 From key_indicative_orc_sub_table)a
8 where a.rank IN (1,2);

```

INFO : MapReduce Total cumulative CPU time: 8 seconds 0 msec  
 INFO : Ended Job = job\_1566736243324\_0007  
 INFO : MapReduce Jobs Launched:  
 INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 8.0 sec HDFS Read: 31493 HDFS Write: 531 SUCCESS  
 INFO : Total MapReduce CPU Time Spent: 8 seconds 0 msec  
 INFO : Completed executing command(queryId=hive\_20190825160000\_1b42d74d-bca6-46e6-9249-7948e24f31a2); Time taken: 20.32 seconds  
 INFO : OK

Query History Saved Queries Results (18) Q ?

COLUMNS (5) Q

| a.state_name   | a.state_district_name | a.sex_ratio | a.rank |
|----------------|-----------------------|-------------|--------|
| 1 Assam        | Kamrup                | 925         | 1      |
| 2 Assam        | North Cachar Hills    | 941         | 2      |
| 3 Bihar        | Pashchim Champaran    | 894         | 1      |
| 4 Bihar        | Khagaria              | 900         | 2      |
| 5 Chhattisgarh | Koriya                | 937.3       | 1      |
| 6 Chhattisgarh | Bilaspur              | 948.43      | 2      |

```

Select * from
(Select
  state_name,
  state_district_Name,
  sex_ratio,
  RANK() OVER (PARTITION BY state_name order by sex_ratio) as rank
From key_indicative_hbase_sub_tbl)a
Where a.rank IN (1,2);

```

Hive Add a name... Add a description...

26.72s default text ?

```

1 Select * from
2 (Select
3   state_name,
4   state_district_Name,
5   sex_ratio,
6   RANK() OVER (PARTITION BY state_name order by sex_ratio) as rank
7 From key_indicative_hbase_sub_tbl)a
8 where a.rank IN (1,2);

```

INFO : MapReduce Total cumulative CPU time: 8 seconds 760 msec  
 INFO : Ended Job = job\_1566736243324\_0012  
 INFO : MapReduce Jobs Launched:  
 INFO : Stage-Stage-1: Map: 1 Reduce: 1 Cumulative CPU: 8.76 sec HDFS Read: 19665 HDFS Write: 531 SUCCESS  
 INFO : Total MapReduce CPU Time Spent: 8 seconds 760 msec  
 INFO : Completed executing command(queryId=hive\_20190825162121\_fa58d951-301e-426d-a1d3-61d425ba0455); Time taken: 26.118 seconds  
 INFO : OK

Query History Saved Queries Results (18) Q ?

COLUMNS (5) Q

| a.state_name   | a.state_district_name | a.sex_ratio | a.rank |
|----------------|-----------------------|-------------|--------|
| 1 Assam        | Kamrup                | 925         | 1      |
| 2 Assam        | North Cachar Hills    | 941         | 2      |
| 3 Bihar        | Pashchim Champaran    | 894         | 1      |
| 4 Bihar        | Khagaria              | 900         | 2      |
| 5 Chhattisgarh | Koriya                | 937.3       | 1      |
| 6 Chhattisgarh | Bilaspur              | 948.43      | 2      |