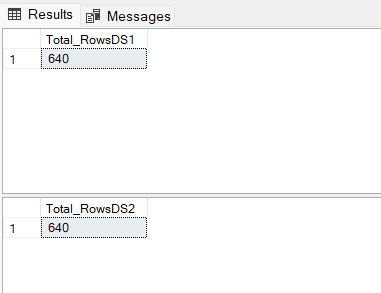
**INDIAN CENSUS – 2011**

SQL PROJECT

**Q1. Number of rows into our dataset1**

SELECT COUNT(\*) AS Total\_RowsDS1 FROM Dataset1;

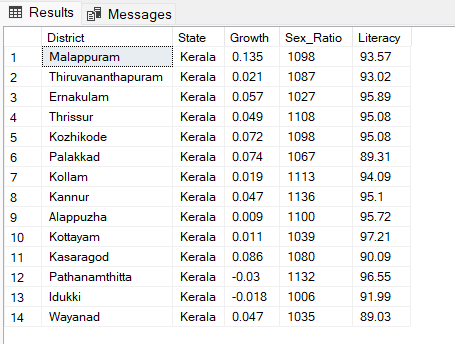
SELECT COUNT(\*) AS Total\_RowsDS2 FROM Dataset2;

****

**Q2. Dataset for Specific state**

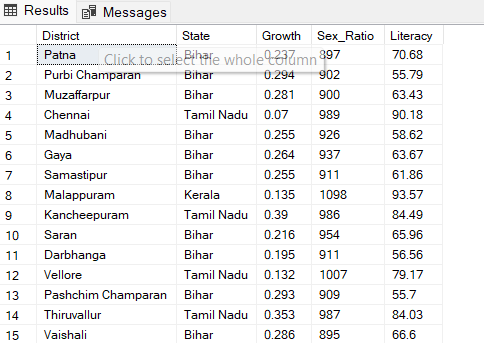
SELECT \* FROM Dataset1

WHERE State in ('Kerala');

****

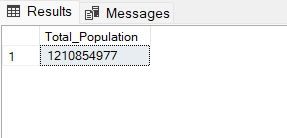
SELECT \* FROM Dataset1

WHERE State in ('Kerala','Tamil Nadu','Bihar');



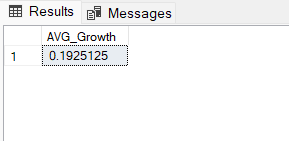
**Q3. Population of India**

SELECT SUM(Population)Total\_Population FROM Dataset2;

****

**Q4. Average growth rate**

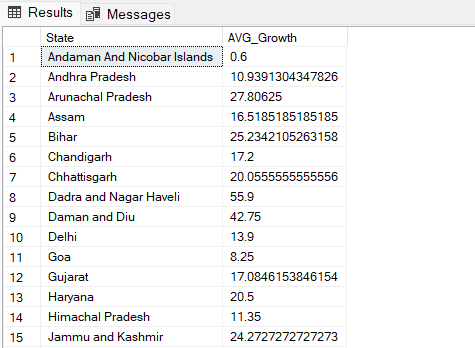
SELECT AVG(Growth)AVG\_Growth FROM Dataset1;

****

**Q5. Average growth rate by State**

SELECT State,(AVG(Growth)\*100)AVG\_Growth FROM Dataset1

GROUP BY State;

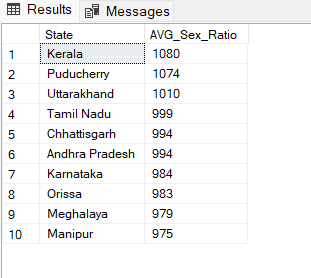
****

**Q6. Average sex ratio by Top 10 State**

SELECT TOP 10 State, AVG(Sex\_Ratio)AVG\_Sex\_Ratio FROM Dataset1

GROUP BY State

ORDER BY AVG\_Sex\_Ratio DESC;



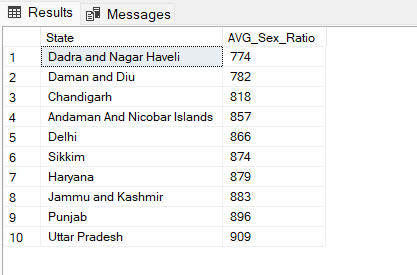
**Q7. Average sex ratio by Bottom 10 State**

SELECT Top 10 State,AVG(Sex\_Ratio)AVG\_Sex\_Ratio

FROM Dataset1

GROUP BY State

ORDER BY AVG\_Sex\_Ratio ASC;



**Q8. Average Literacy rate by State**

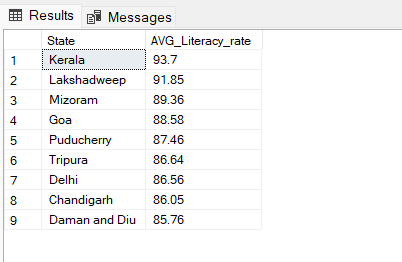
SELECT State,ROUND( AVG(Literacy),2)AVG\_Literacy\_rate

FROM Dataset1

GROUP BY State

HAVING ROUND( AVG(Literacy),2)> 85

ORDER BY AVG\_Literacy\_rate DESC;

****

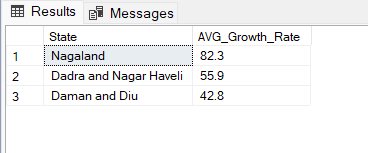
**Q9. Top 3 State showing highest growth ratio**

SELECT TOP 3 State,ROUND((AVG(Growth)\*100),1)AVG\_Growth\_Rate

FROM Dataset1

GROUP BY State

ORDER BY AVG\_Growth\_Rate DESC;

****

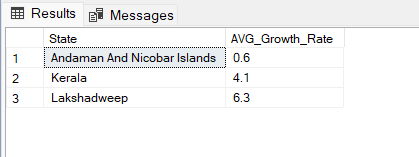
**Q10. Bottom 3 State showing Lowest growth ratio**

SELECT TOP 3 State,ROUND((AVG(Growth)\*100),1)AVG\_Growth\_Rate

FROM Dataset1

GROUP BY State

ORDER BY AVG\_Growth\_Rate ASC;

****

**Q11. Top and bottom 3 states in literacy state**

DROP TABLE IF EXISTS #Topstates;

CREATE TABLE #Topstates

(State nvarchar(50),

Topstates float

)

INSERT INTO #Topstates

SELECT TOP 3 State, ROUND(AVG(Literacy),2)AVG\_Literacy\_rate

FROM Dataset1

GROUP BY State

ORDER BY AVG\_Literacy\_rate DESC;

SELECT \* FROM #Topstates

DROP TABLE IF EXISTS #Bottomstates;

CREATE TABLE #Bottomstates

(State nvarchar(50),

Bottomstates float

)

INSERT INTO #Bottomstates

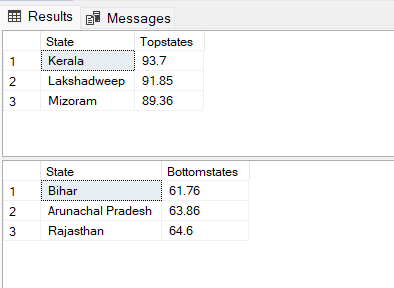
SELECT Top 3 State,ROUND(AVG(Literacy),2)AVG\_Literacy\_rate

FROM Dataset1

GROUP BY State

ORDER BY AVG\_Literacy\_rate ASC;

SELECT \* FROM #Bottomstates

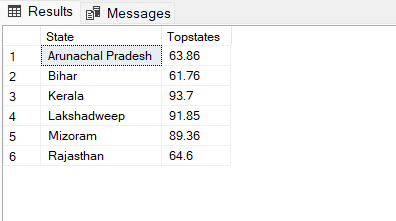


**Q12. Union Operator**

SELECT \* FROM #Topstates

UNION

SELECT \* FROM #Bottomstates

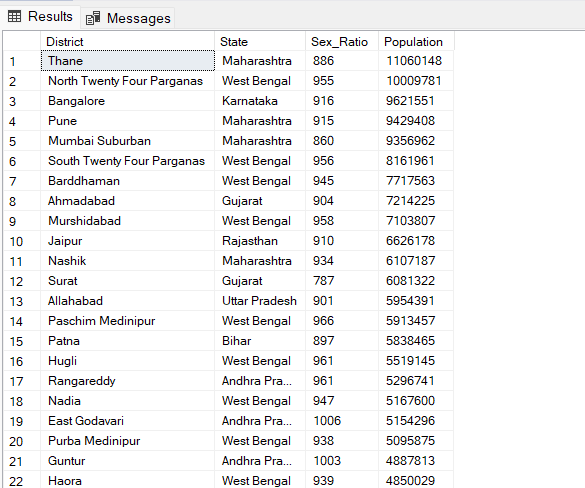
****

**Q13. Joining both Table**

SELECT Dataset1.District,Dataset1.State,Dataset1.Sex\_Ratio,Dataset2.Population

FROM Dataset1

INNER JOIN Dataset2 ON Dataset1.District = Dataset2.District



**Q14. Total males and females**

**Number of females = Total population \* Sex ratio / (1000 + Sex ratio)**

**Number of males = Total population - Number of females**

SELECT DATA2.State,

SUM(DATA2.Females)AS Total\_females,

SUM(DATA2.Males)AS Total\_males

FROM

(SELECT DATA1.District,DATA1.State,

ROUND(DATA1.Population \* DATA1.Sex\_Ratio / (1000 + DATA1.Sex\_Ratio),0) AS Females,

ROUND(DATA1.Population-(DATA1.Population \* DATA1.Sex\_Ratio / (1000 + DATA1.Sex\_Ratio)),0) AS Males

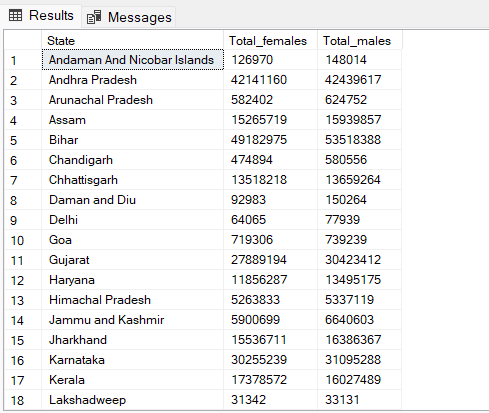
FROM

( SELECT Dataset1.District,Dataset1.State,Dataset1.Sex\_Ratio,Dataset2.Population

FROM Dataset1

INNER JOIN Dataset2 ON Dataset1.District = Dataset2.District) AS DATA1)AS DATA2

GROUP BY DATA2.State

****

**Q15. Find number of Literate and Illiterate people**

**Total number of literate people = Total population \* (Literacy rate / 100)**

SELECT D2.State,

SUM(D2.Total\_literate\_people) AS Literate\_people,

SUM(D2.Total\_illiterate\_people) AS Illiterate\_people

FROM

(SELECT D1.District, D1.State, D1.Population,

ROUND((D1.Population\*D1.Literacy/100),0) AS Total\_literate\_people,

ROUND(D1.Population-(D1.Population\*D1.Literacy/100),0) AS Total\_illiterate\_people

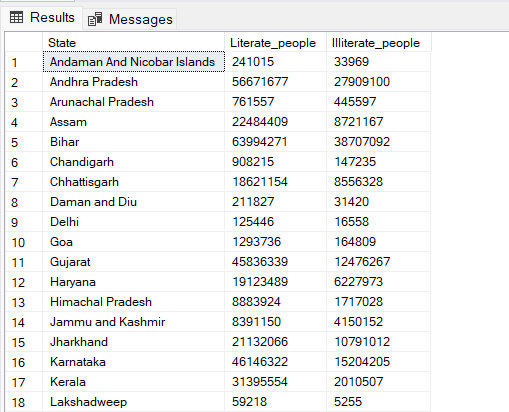
FROM

(SELECT Dataset1.District,Dataset1.State,Dataset1.Literacy,Dataset2.Population

FROM Dataset1

INNER JOIN Dataset2 ON Dataset1.District = Dataset2.District) AS D1) AS D2

GROUP BY D2.State

****

**Q16. Find Population in previous census**

**Previous population = Current population / (1 + (Growth rate / 100))**

SELECT SUM(D3.Previous\_Population)AS Previous\_Population,

SUM(D3.Current\_Population)AS Current\_Population

FROM

(SELECT D2.State,

SUM(D2.Previous\_Population) AS Previous\_Population,

SUM(D2.Population) AS Current\_Population

FROM

(SELECT D1.District,D1.State,

ROUND(D1.Population/(1+D1.Growth\_Rate/100),0)AS Previous\_Population,

D1.Population

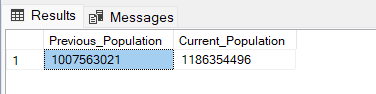
FROM

(SELECT Dataset1.District,Dataset1.State,(Dataset1.Growth\*100)AS Growth\_Rate,Dataset2.Population

FROM Dataset1

INNER JOIN Dataset2 ON Dataset1.District = Dataset2.District) AS D1)AS D2

GROUP BY State)D3

****

THANK YOU