



# KONGU ENGINEERING COLLEGE



Transform Yourself

(Autonomous)

PERUNDURAI, ERODE- 638 060

2021 - 2022

1 CREDIT COURSE 2021-22(Even Sem)

DATA VISUALIZATION USING TABLEAU

PROJECT PRESENTATION

Name & Roll No: MIDHUNA A-20ITR064

PRIYADHARSHINI M-20ITR081

RAKSHANA DEVI V S-20ITR086

Branch : INFORMATION TECHNOLOGY

Semester : IV SEMESTER

Year : SECOND YEAR

Section : B

## AIM:

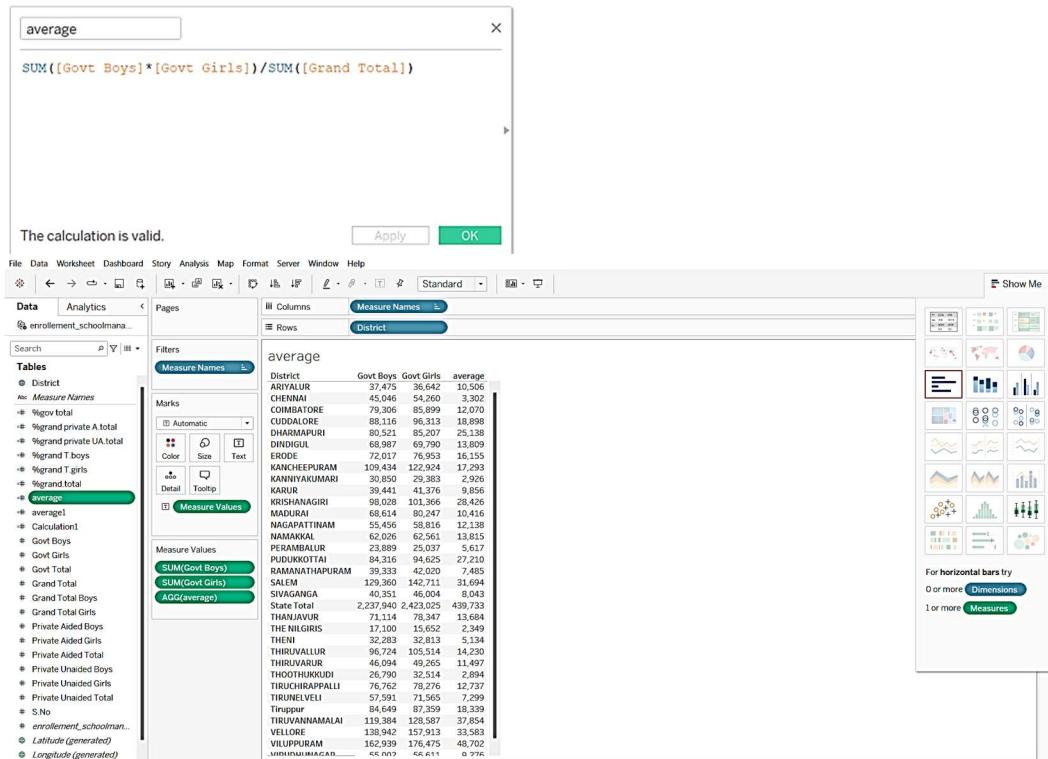
To implement the following questions for the data set :enrollment\_schoolmanagement using data visualization tool in tableau.

1. Show the records of average of govt Boys and girls students getting educated, so that the user can analyse a particular district govt schools.

## STEPS INVOLVED:

- Drag and drop districts to rows.
- Drag and drop govt boys and govt girls to columns.
- Then find the average of govt boys and govt girls using calculation field to show the records of average of govt Boys and girls students getting educated.

## SCREENSHOT:



## OBSERVATION MADE:

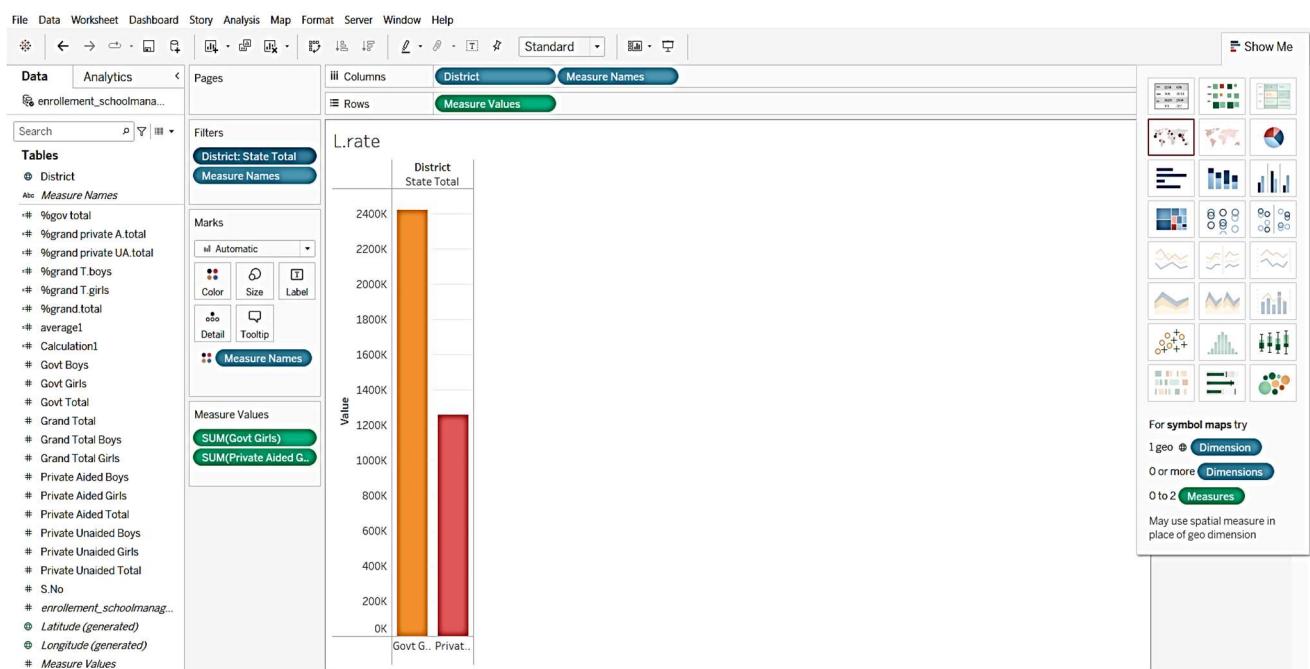
Here, we have shown the records of average of govt Boys and girls students getting educated using calculation field.

2. Analyse and conclude whether the govt girls or private aided girls has enormous literacy rate by accessing the corresponding fields.

### STEPS INVOLVED:

- Drag and drop districts to columns.
- Drag and drop govt girls and private aided girls to rows.
- Drag and drop districts to filter.
- Filter the state total in districts to get the enormous literacy rate between govt girls and private aided girls.

### SCREENSHOT:



### OBSERVATIONS MADE:

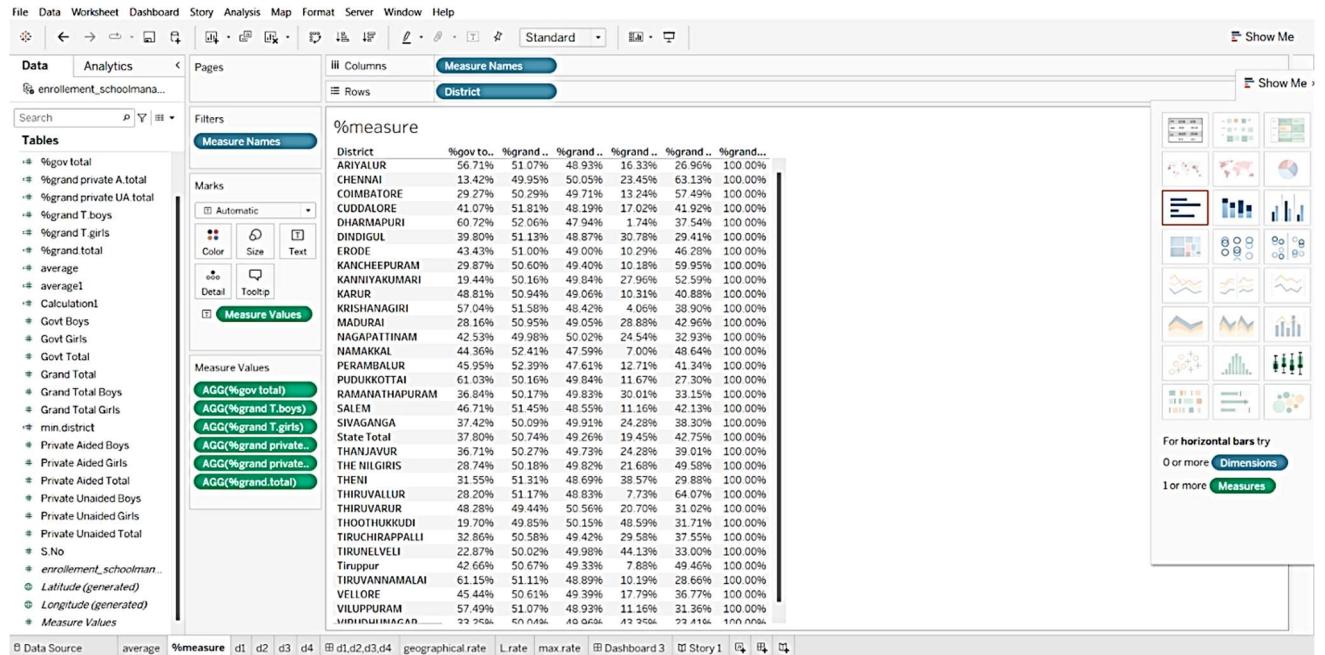
Here, we have analysed and conclude that the govt girls have a enormous literacy rate than the private aided girls by accessing the corresponding fields.

3. List the percentage of students in each district by row in pane.

#### STEPS INVOLVED:

- Drag and drop districts to rows.
- Using calculated field, find the percentage of all the students in each district.
- Drag and drop percentage of govt total, grand total, grand total boys, grand total girls, grand private aided total, grand private unaided total.

#### SCREENSHOT:



#### OBSERVATIONS MADE:

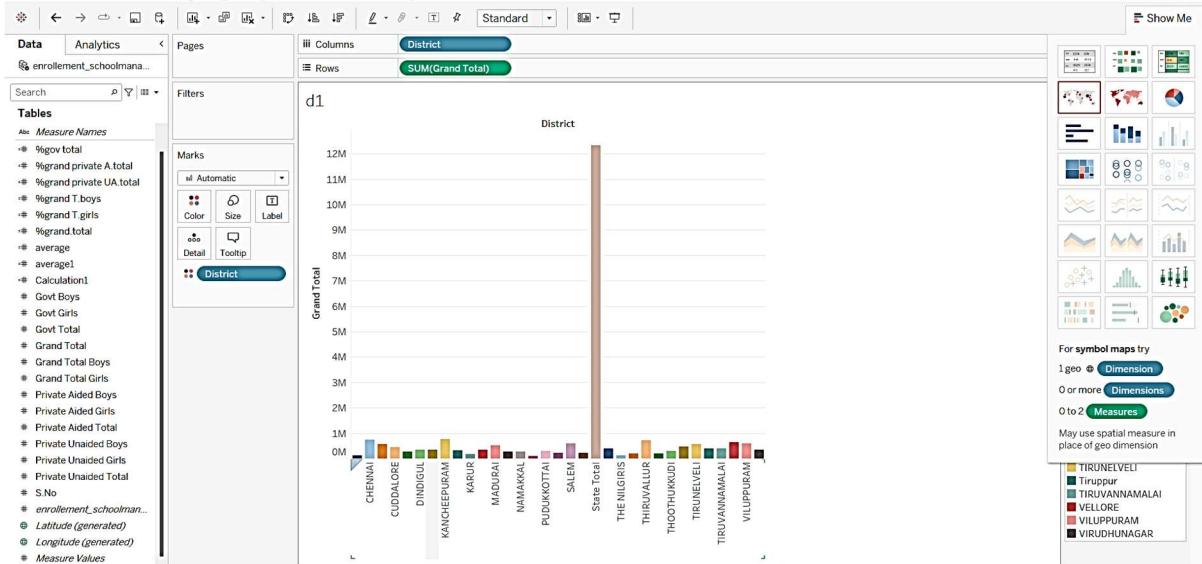
Here, we have listed the percentage of students in each district by row in pane

4. Create a user interactive dashboard that can fetch the educational analysis of every district pointed.

#### VERTICAL BAR GRAPH-STEPS INVOLVED:

- Drag and drop grand total to columns.
- Drag and drop districts to rows.
- Drag and drop districts to colour to get a vertical bar graph.

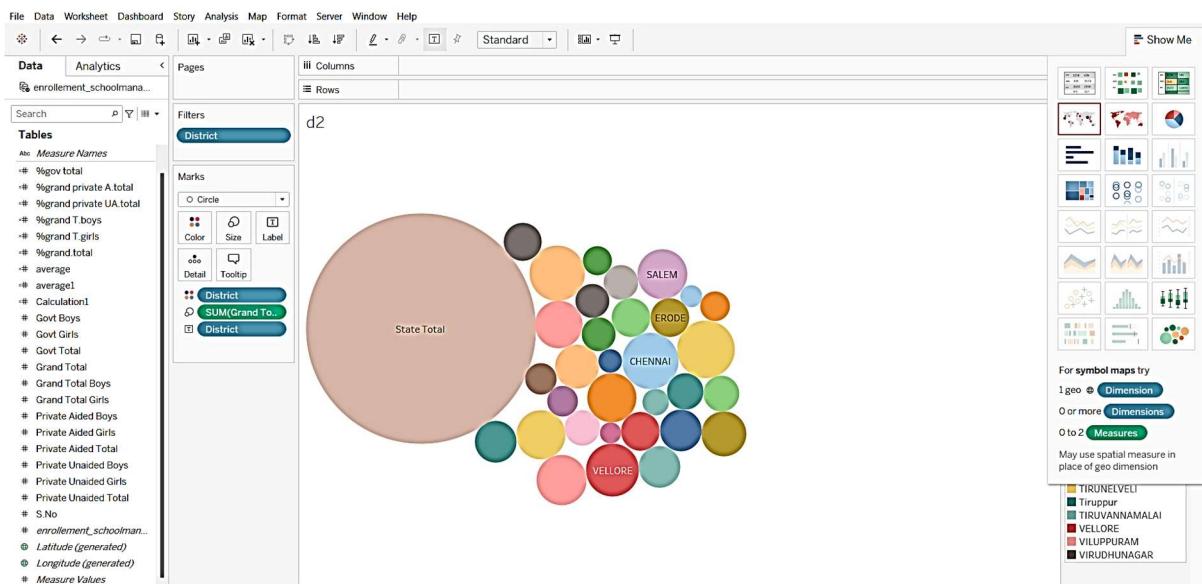
#### SCREENSHOT:



#### PACKED BUBBLES-STEPS INVOLVED:

- Drag and drop districts to the columns and grand total to rows.
- And click packed bubbles to display in colour drag and drop district to colour.
- Now the required graph is displayed.

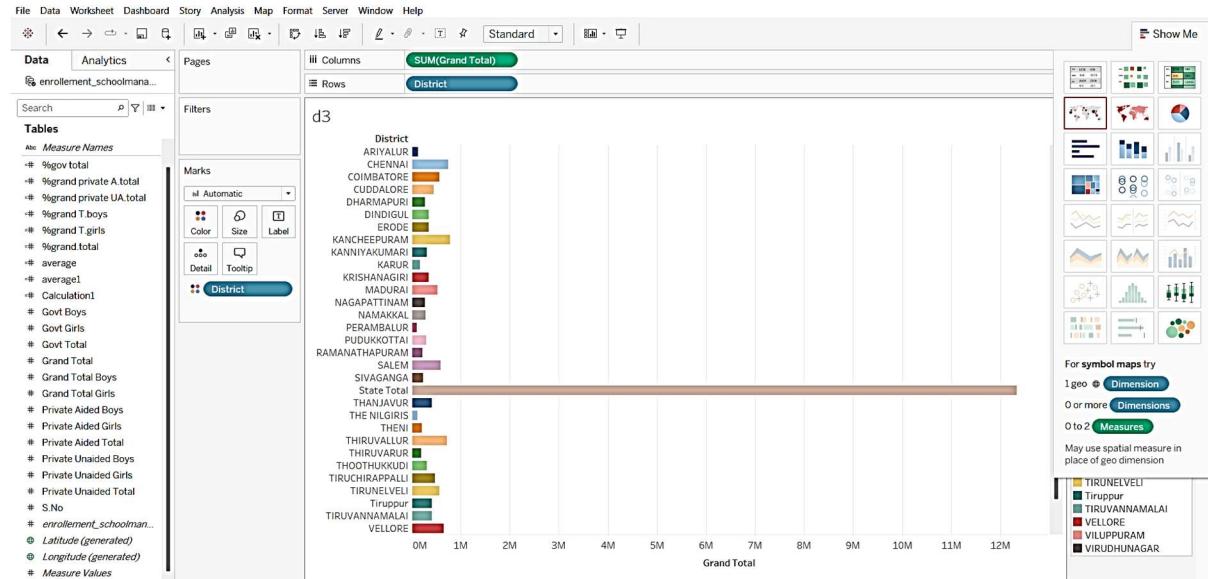
#### SCREENSHOT:



## HORIZONTAL BAR GRAPH-STEPS INVOLVED:

- Drag and drop grand total to columns.
- Drag and drop districts to rows.
- Drag and drop districts to colour to get a horizontal bar graph.

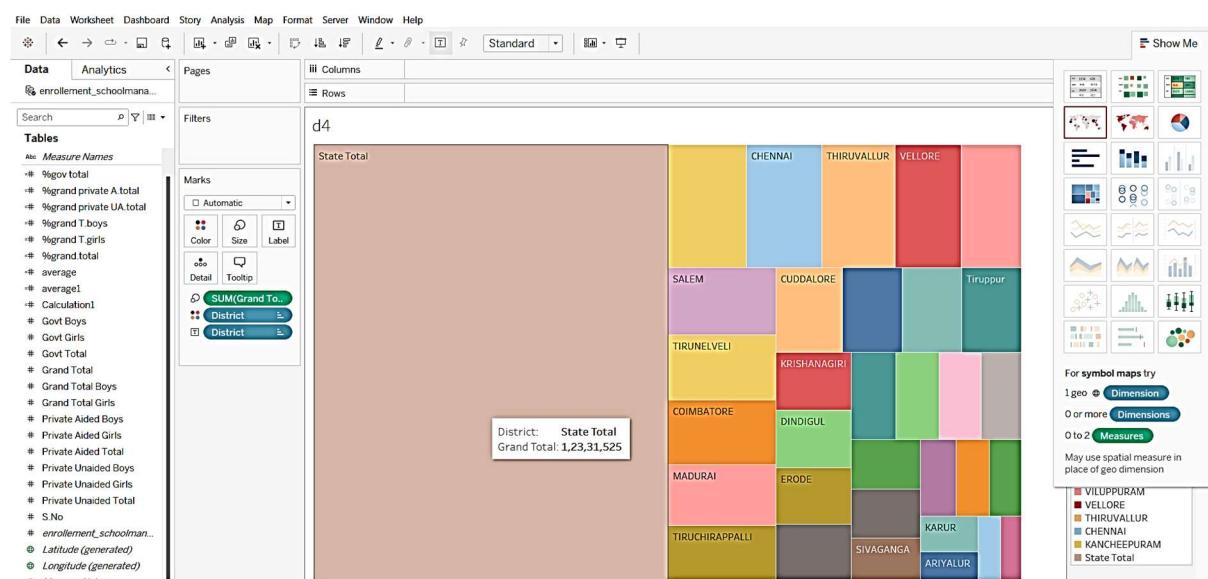
## SCREENSHOT:



## TREE MAPS- STEPS INVOLVED:

- Drag and drop district to columns.
- Drag and drop grand total to rows and in show me click tree maps.
- Now drop district to colour.
- If we need drop district to Label.
- Created a calculated field to show the grand total of students (calculated field).

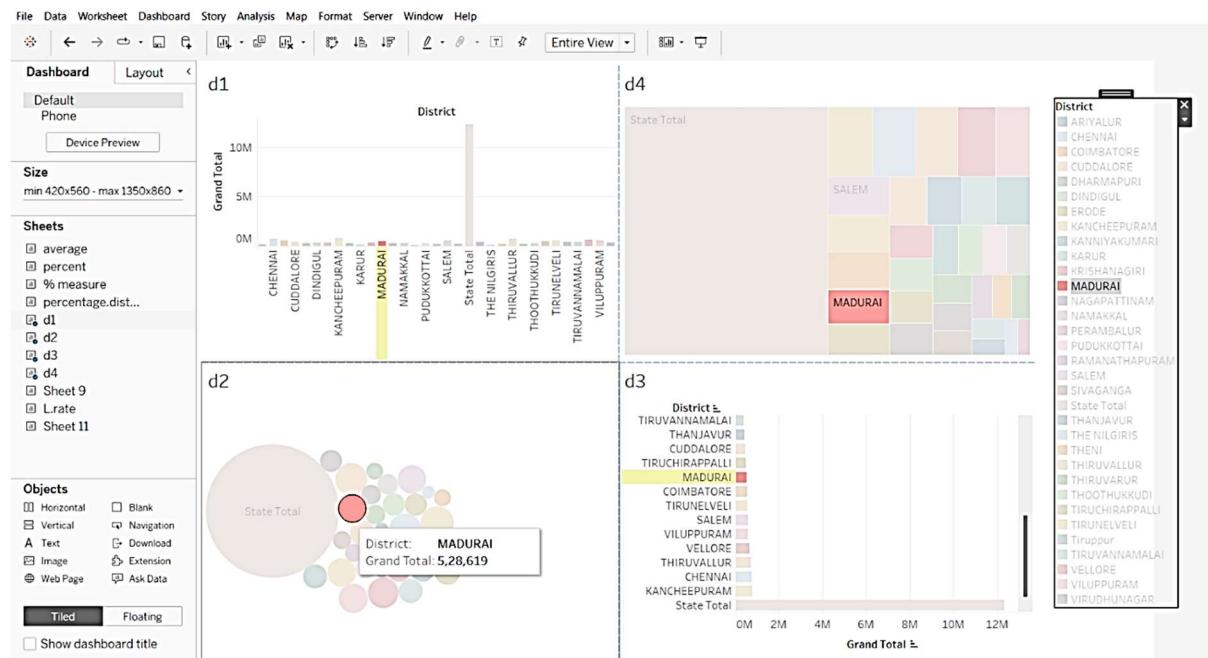
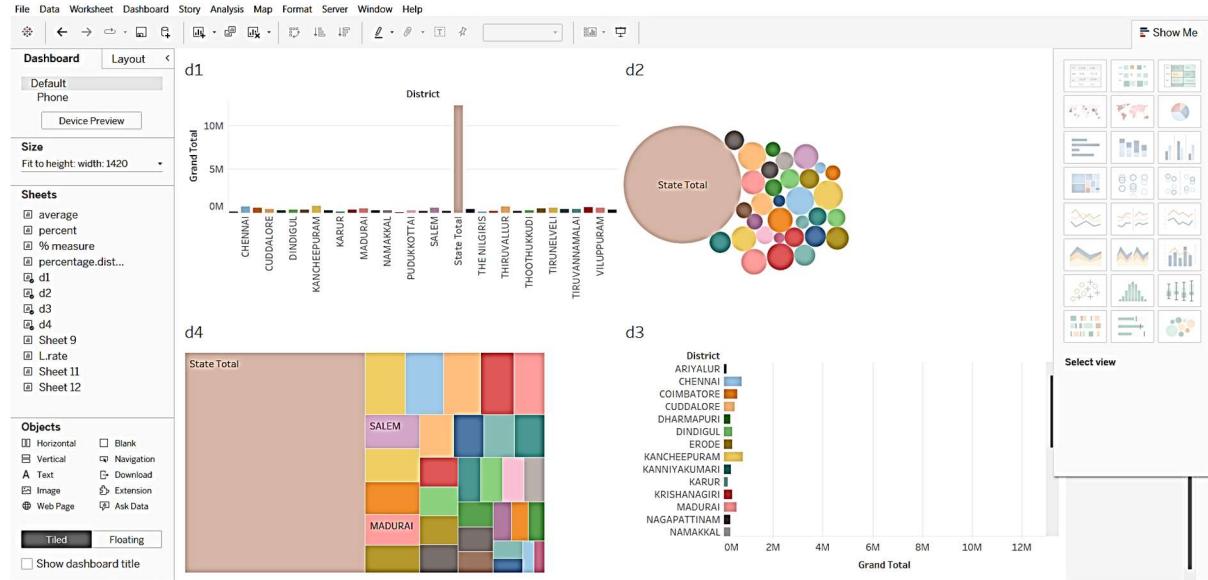
## SCREENSHOT:



## DASHBOARD-STEPS INVOLVED:

- Now we need to display all the sheets in one single page is called dashboard.
- Drag and drop horizontal into the sheets. There will be a blue labeled displayed if fixed correctly.
- Now drag and drop all the sheets it will be displayed in horizontal manner.

## SCREENSHOT:



## OBSERVATIONS MADE:

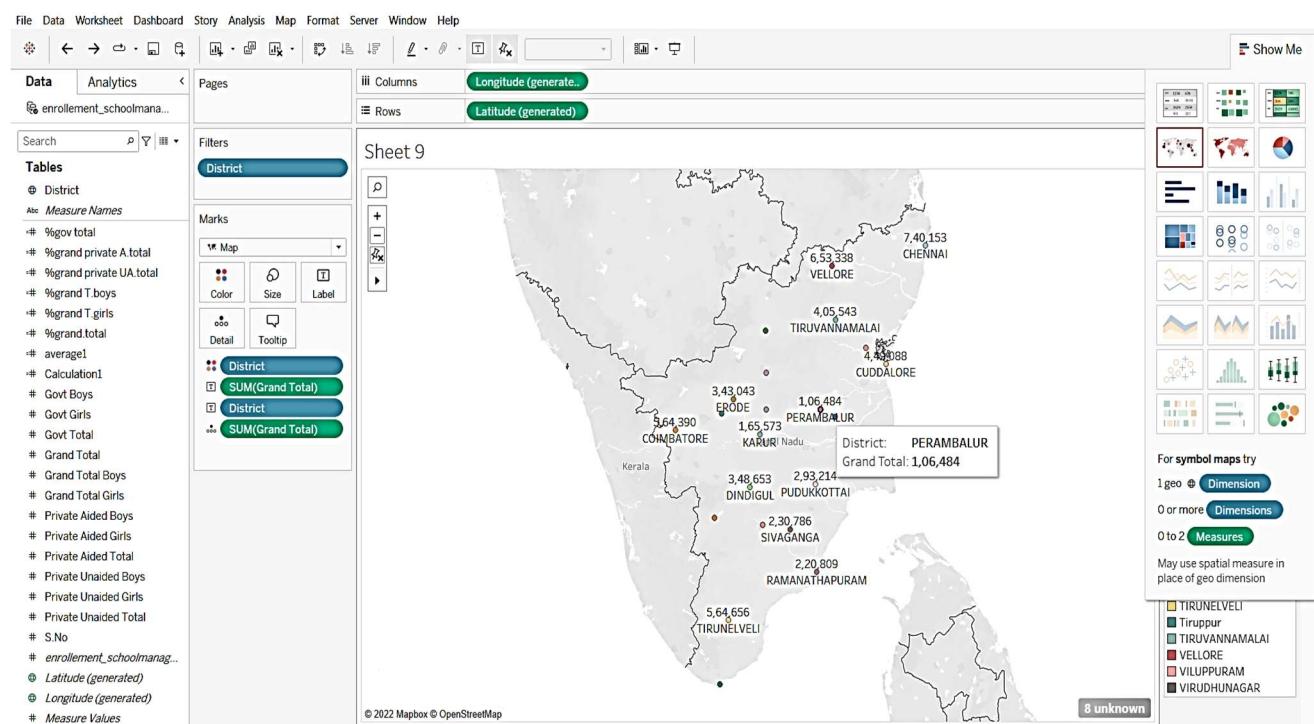
Thus, we have created a user interactive dashboard that can fetch the educational analysis of every district pointed

5. Analyse the section's educational rate with help of geographical maps and identify the district with minimum educational rate.

#### STEPS INVOLVED:

- Drag and drop districts to rows
- Drag and drop grand total to columns.

#### SCREENSHOT:



#### OBSERVATIONS MADE:

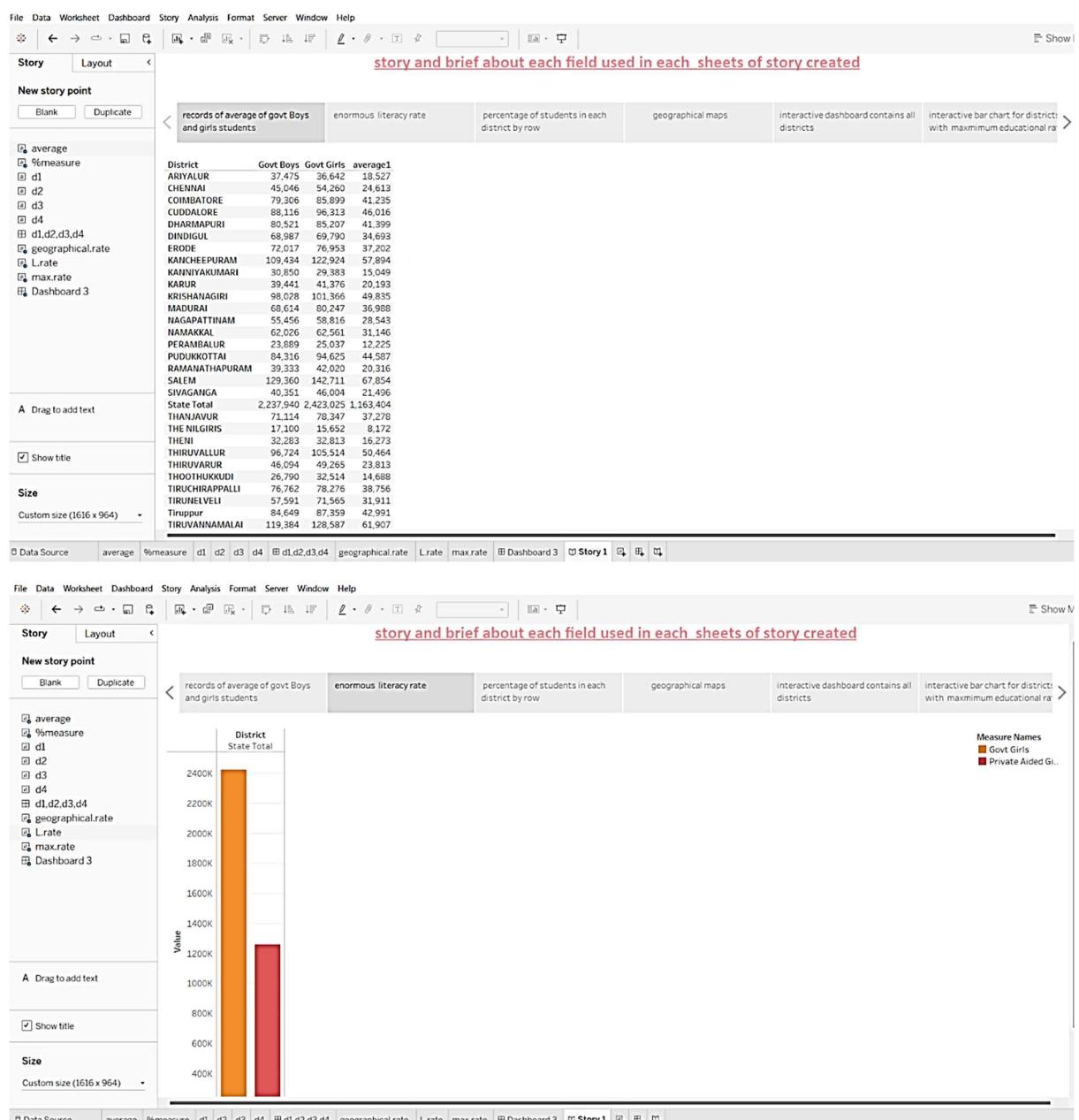
Here, we have analysed the section's educational rate with help of geographical maps and identified the district with minimum educational rate.

6. Duplicate a sheet used above, in story and brief about each field used in each sheet of story created.

### STEPS INVOLVED:

- Drag and drop all the sheets into the story board
- Change the title by double clicking on the title text and we can also add a caption to summarize the story point by clicking on add a caption
- Drag the caption area and adjust the size which is possible to add another story point by dragging and bringing another sheet to drop on the story board
- This is where a sequence of various sheets will be created.

### SCREENSHOT:



File Data Worksheet Dashboard Story Analysis Format Server Window Help

Show M

**Story Layout**

New story point

Blank Duplicate

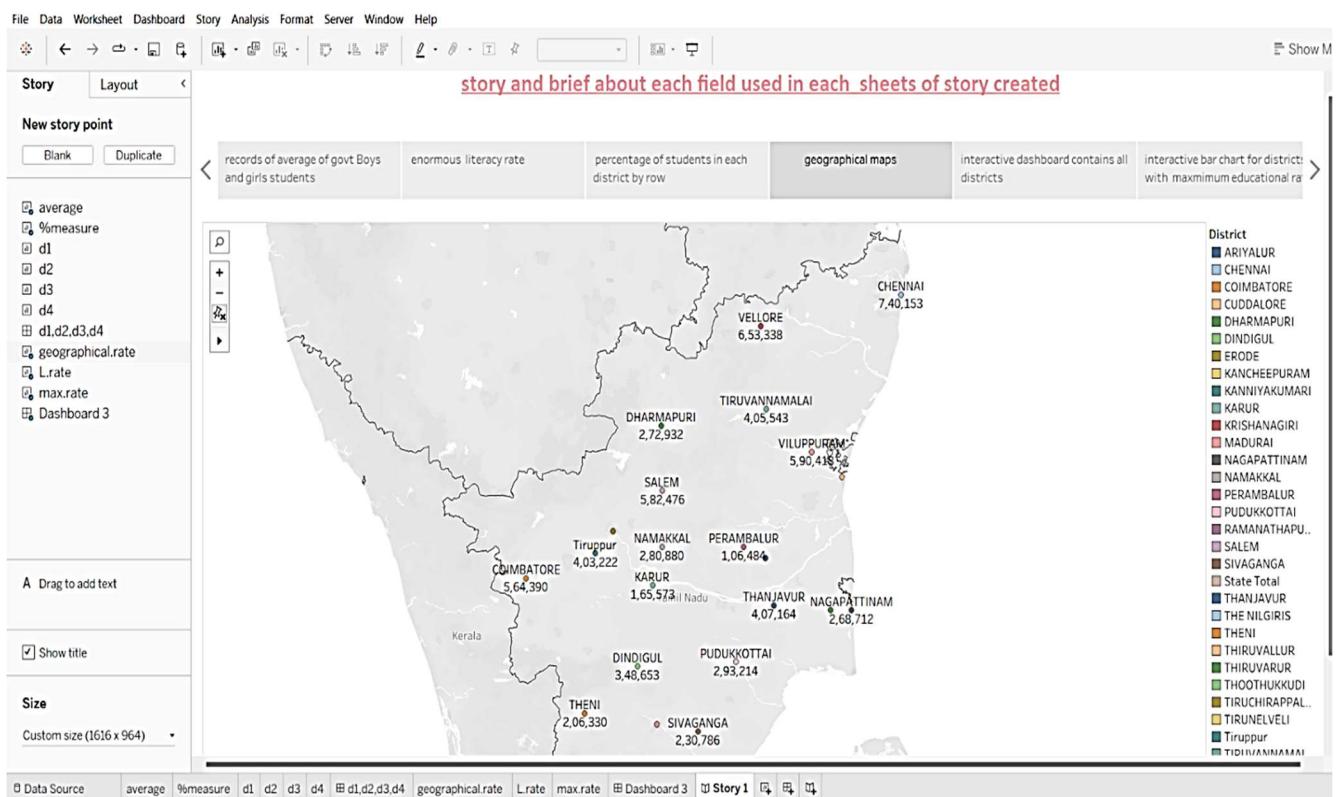
records of average of govt Boys and girls students enormous literacy rate percentage of students in each district by row geographical maps interactive dashboard contains all districts interactive bar chart for districts with maximum educational ra

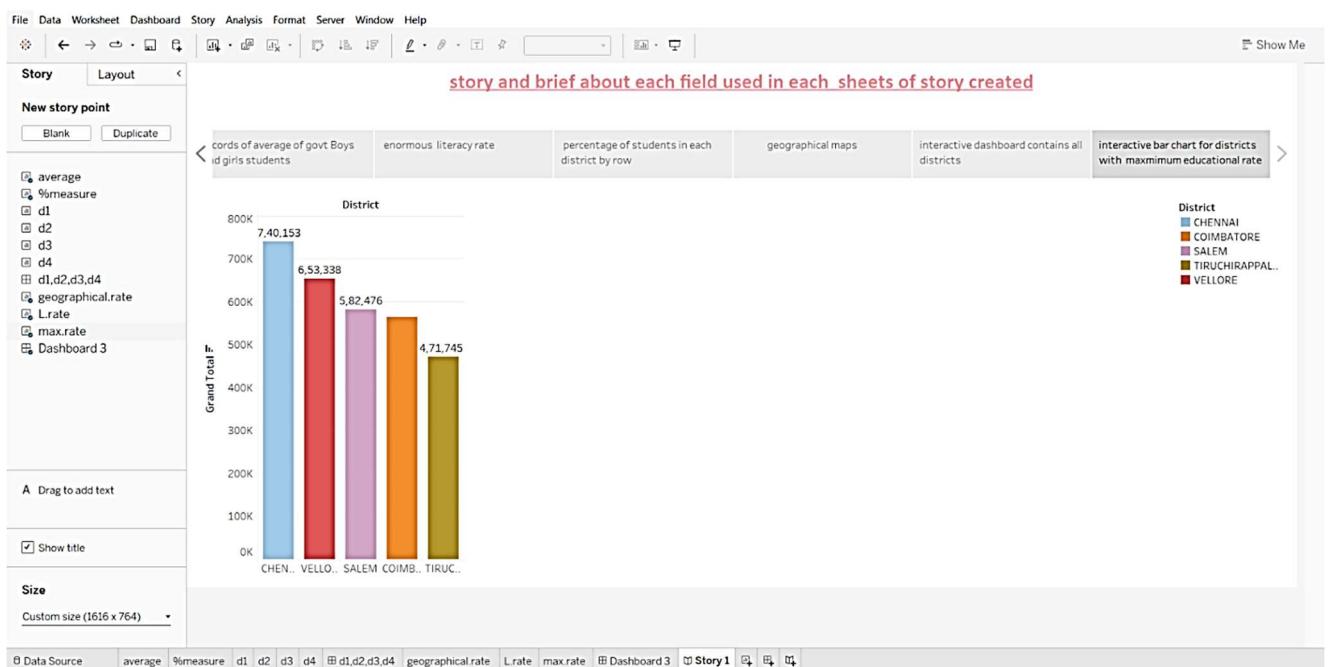
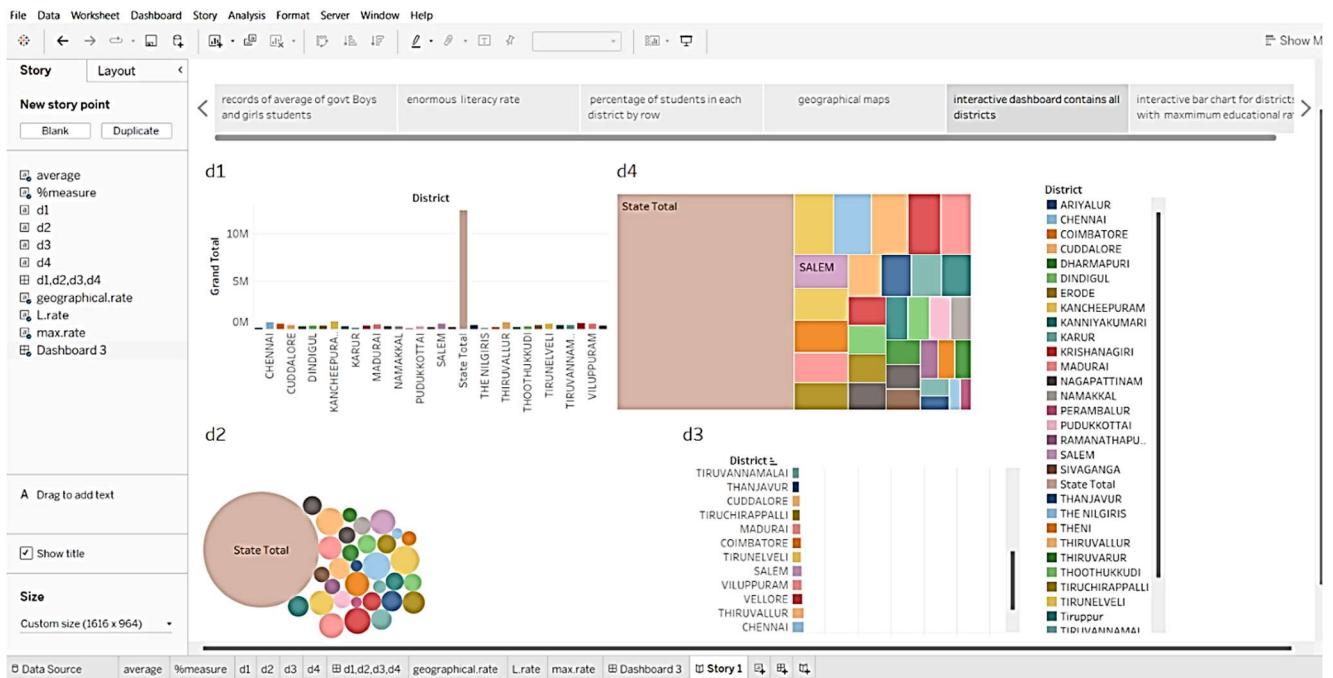
average %measure d1 d2 d3 d4 d1,d2,d3,d4 geographical.rate Lrate max.rate Dashboard 3

District %govt... %grand... %grand... %grand... %grand... %grand... %grand...

|                 |        |        |        |        |        |         |
|-----------------|--------|--------|--------|--------|--------|---------|
| ARIALYALUR      | 56.71% | 51.07% | 49.93% | 16.33% | 26.96% | 100.00% |
| CHENNAI         | 13.42% | 49.95% | 50.05% | 23.45% | 63.13% | 100.00% |
| COIMBATORE      | 29.27% | 50.29% | 49.71% | 13.24% | 57.49% | 100.00% |
| CUDDALORE       | 41.07% | 51.81% | 48.19% | 17.02% | 41.92% | 100.00% |
| DHARMAPURI      | 60.72% | 52.06% | 47.94% | 1.74%  | 37.54% | 100.00% |
| DINDIGUL        | 39.80% | 51.13% | 48.87% | 30.78% | 29.41% | 100.00% |
| ERODE           | 43.43% | 51.00% | 49.00% | 10.29% | 46.28% | 100.00% |
| KANCHEEPURAM    | 29.87% | 50.60% | 49.40% | 10.18% | 59.95% | 100.00% |
| KANNIYAKUMARI   | 19.44% | 50.16% | 49.84% | 27.96% | 52.59% | 100.00% |
| KARUR           | 48.81% | 50.94% | 49.06% | 10.31% | 40.88% | 100.00% |
| KRISHNAGIRI     | 57.04% | 51.58% | 48.42% | 4.06%  | 38.90% | 100.00% |
| MADURAI         | 28.16% | 50.95% | 49.05% | 28.88% | 42.96% | 100.00% |
| NAGAPATTINAM    | 42.53% | 49.98% | 50.02% | 24.54% | 32.93% | 100.00% |
| NAMAKKAL        | 44.36% | 52.41% | 47.59% | 7.00%  | 48.64% | 100.00% |
| PERAMBALUR      | 45.95% | 52.39% | 47.61% | 12.71% | 41.34% | 100.00% |
| PUDUKKOTTAI     | 61.03% | 50.16% | 49.84% | 11.67% | 27.30% | 100.00% |
| RAMANATHAPURAM  | 36.84% | 50.17% | 49.83% | 30.01% | 33.15% | 100.00% |
| SALEM           | 46.71% | 51.45% | 48.55% | 11.16% | 42.13% | 100.00% |
| SIVAGANGA       | 37.42% | 50.09% | 49.91% | 24.28% | 38.30% | 100.00% |
| State Total     | 37.80% | 50.74% | 49.26% | 19.45% | 42.75% | 100.00% |
| THANJAVUR       | 36.71% | 50.27% | 49.73% | 24.28% | 39.01% | 100.00% |
| THE NILGIRIS    | 28.74% | 50.18% | 49.82% | 21.66% | 49.58% | 100.00% |
| THENI           | 31.55% | 51.31% | 48.69% | 38.57% | 29.88% | 100.00% |
| THIRUVALLUR     | 28.20% | 51.17% | 48.83% | 7.73%  | 64.07% | 100.00% |
| THIRUVARUR      | 48.20% | 49.44% | 50.56% | 20.70% | 31.02% | 100.00% |
| THOOTHUKKUDI    | 19.70% | 49.85% | 50.15% | 48.59% | 31.71% | 100.00% |
| TIRUCHIRAPPALLI | 32.86% | 50.58% | 49.42% | 29.58% | 37.55% | 100.00% |
| TIRUNELVELI     | 22.87% | 50.02% | 49.96% | 44.13% | 33.00% | 100.00% |
| Tiruppur        | 42.66% | 50.67% | 49.33% | 7.88%  | 49.46% | 100.00% |

Data Source average %measure d1 d2 d3 d4 d1,d2,d3,d4 geographical.rate Lrate max.rate Dashboard 3 Story 1





## OBSERVATIONS MADE:

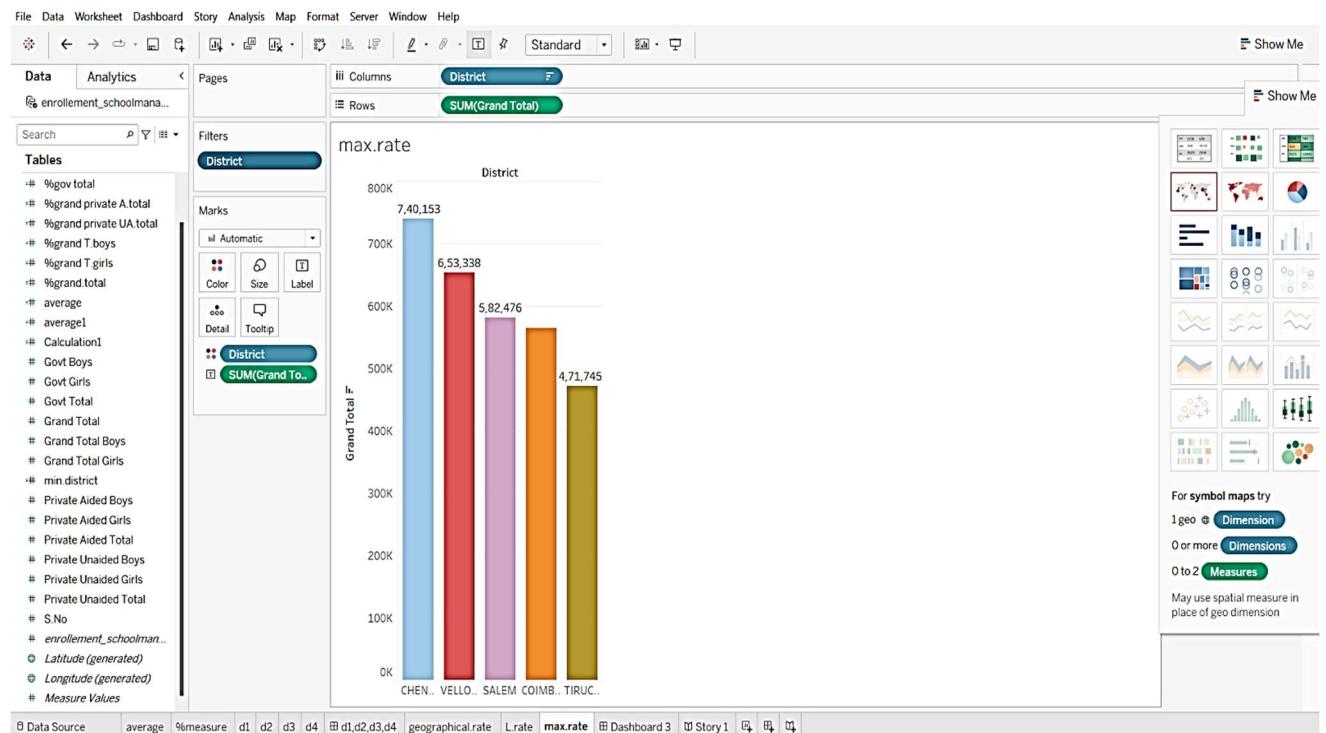
Here, we have duplicated a sheet used above, in story and briefed about each field used in each sheet of story created.

7.create a parameterized interactive bar chart to know the top five districts with maximum educational rate.

### STEPS INVOLVED:

- Drag and drop districts in column.
- Drag and drop the grand total in row and use districts in filter.
- Now drop district to colour.
- If we need drop district to Label.

### SCREENSHOT:



### OBSERVATIONS MADE:

Here, we have created a parameterized interactive bar chart to know the top five districts with maximum educational rate. Thus, the Districts Chennai, Vellore, Salem, Coimbatore, Tiruchirappalli are the top 5 districts with maximum educational rate.

8. Try to export the sheets to all the formats possible from tableau and analyses it.

### STEPS INVOLVED:

- To export all the sheets, save the project
- It will navigate to the tableau profile, then click the publish button
- The sheets get exported, then download the formats possible from tableau and analyse.

### SCREENSHOTS:

| District       | Govt Boys | Govt Girls | average1  |
|----------------|-----------|------------|-----------|
| ARIYALUR       | 37,475    | 36,642     | 18,527    |
| CHENNAI        | 45,046    | 54,260     | 24,613    |
| COIMBATORE     | 79,306    | 85,099     | 41,235    |
| CUDDALORE      | 88,116    | 96,313     | 46,016    |
| DHARMAPURI     | 80,521    | 85,207     | 41,399    |
| DINDIGUL       | 68,987    | 69,790     | 34,693    |
| ERODE          | 72,017    | 76,953     | 37,202    |
| KANCHEEPURAM   | 109,434   | 122,924    | 57,894    |
| KANNIYAKUMARI  | 30,850    | 29,383     | 15,049    |
| KARUR          | 39,441    | 41,376     | 20,193    |
| KRISHNAGIRI    | 98,028    | 101,366    | 49,835    |
| MADRASI        | 68,614    | 80,247     | 36,988    |
| NAGAPATTINAM   | 55,456    | 58,816     | 28,543    |
| NAMakkAL       | 62,026    | 62,561     | 31,146    |
| PERAMBALUR     | 23,889    | 25,037     | 12,225    |
| PUDUKKOTTAI    | 84,316    | 94,625     | 44,587    |
| RAMANATHAPURAM | 39,333    | 42,020     | 20,316    |
| SALEM          | 129,360   | 142,711    | 67,854    |
| SIVAGANGA      | 40,351    | 46,004     | 21,496    |
| State Total    | 2,237,940 | 2,423,025  | 1,163,404 |
| THANJAVUR      | 71,114    | 78,347     | 37,278    |
| THE NILGIRIS   | 17,100    | 15,652     | 8,172     |
| TIRUNELVELI    | 32,392    | 32,012     | 16,773    |

schoolmanagement (Tableau Public)

File Data Worksheet Dashboard Analysis Map Format Help

midhuna

Data Analytics < Pages Columns Measure Names

enrollement\_schoolmanagement

Search ▾

Measure Names

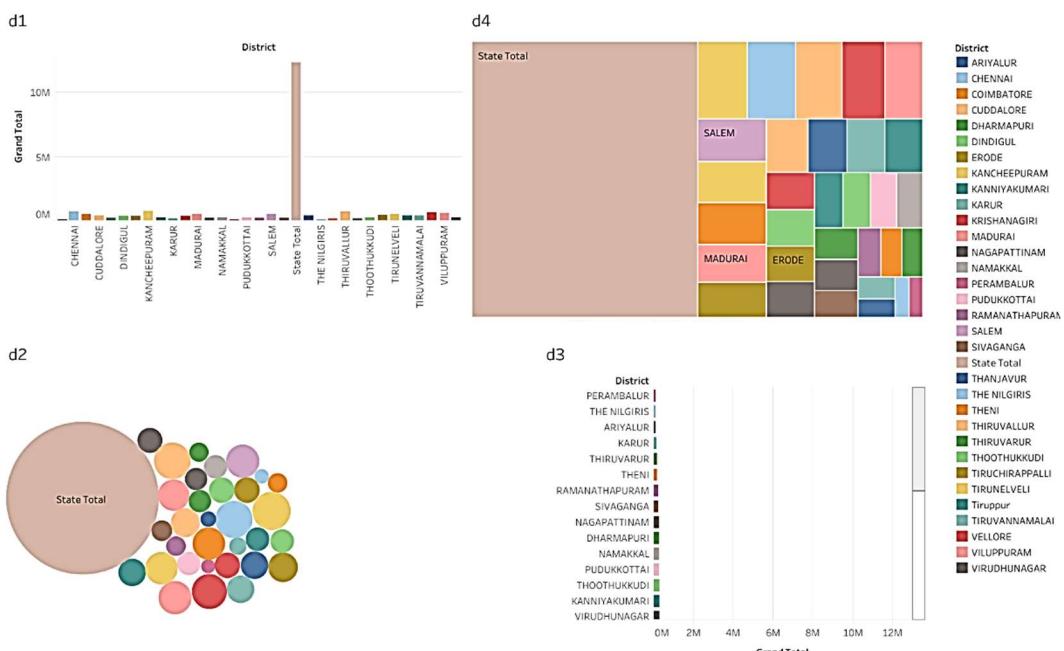
average

District Govt Boys Govt Girls average1

| District       | Govt Boys | Govt Girls | average1  |
|----------------|-----------|------------|-----------|
| ARIYALUR       | 37,475    | 36,642     | 18,527    |
| CHENNAI        | 45,046    | 54,260     | 24,613    |
| COIMBATORE     | 79,306    | 85,899     | 41,235    |
| CUDDALORE      | 88,116    | 96,313     | 46,016    |
| DHARMAPURI     | 80,521    | 85,207     | 41,399    |
| DINDIGUL       | 68,987    | 69,790     | 34,693    |
| ERODE          | 72,017    | 76,953     | 37,202    |
| KANCHEEPURAM   | 109,434   | 122,924    | 57,894    |
| KANNIYAKUMARI  | 30,850    | 29,383     | 15,049    |
| KARUR          | 39,441    | 41,376     | 20,193    |
| KRISHNAGIRI    | 98,028    | 101,366    | 49,835    |
| MADURAI        | 68,614    | 80,247     | 36,988    |
| NAGAPATTINAM   | 55,456    | 58,816     | 28,543    |
| NAMAKKAL       | 62,026    | 62,561     | 31,146    |
| PERAMBALUR     | 23,889    | 25,037     | 12,225    |
| PUDUKKOTTAI    | 84,316    | 94,625     | 44,587    |
| RAMANATHAPURAM | 39,333    | 42,020     | 20,316    |
| SALEM          | 129,360   | 142,711    | 67,854    |
| SIVAGANGA      | 40,351    | 46,004     | 21,496    |
| State Total    | 2,237,940 | 2,423,025  | 1,163,404 |
| THANJAVUR      | 71,114    | 78,347     | 37,278    |
| THE NILGIRIS   | 17,100    | 15,652     | 8,172     |
| THERI          | 22,282    | 22,012     | 14,272    |

Data Source average %measure d1 d2 d3 d4 d1,d2,d3,d4 geographical,rate,lrate,max.rate Dashboard 3 Story 1 percentage,district

## DASHBOARD -EXPORTED IMAGE:



## DASHBOARD -EXPORTED CROSSTAB-EXCEL:

Download Crosstab X

Select a sheet from this dashboard

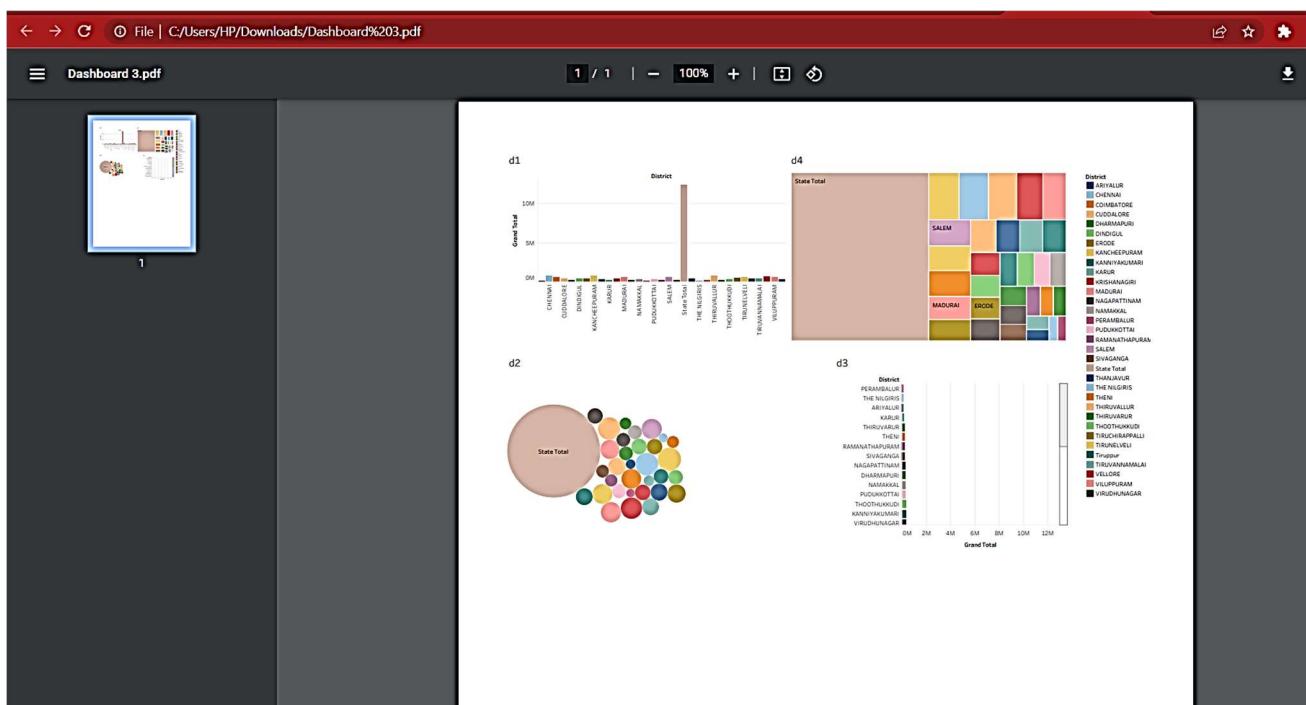
d1 d2 d3 d4

Select Format

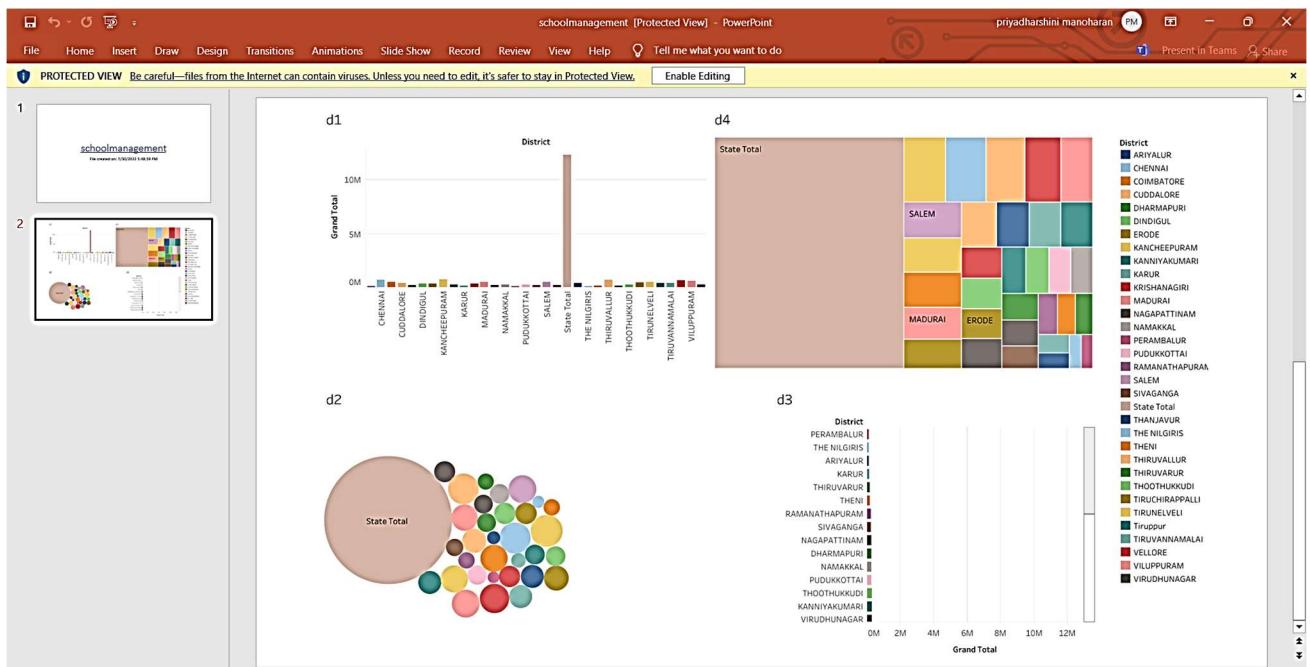
Excel  CSV

Download

## DASHBOARD-EXPORTED PDF:



## DASHBOARD- EXPORTED POWERPOINT:



## PUBLISHED LINK:

<https://public.tableau.com/authoring/schoolmanagement/average#1>

## OBSERVATIONS MADE:

Thus, we have exported all the sheets to all the formats possible from tableau and analysed it.

## CONCLUSION:

Thus, we have successfully completed the given questions and analysed the data set: enrollment\_schoolmanagement by using data visualization tool in tableau.