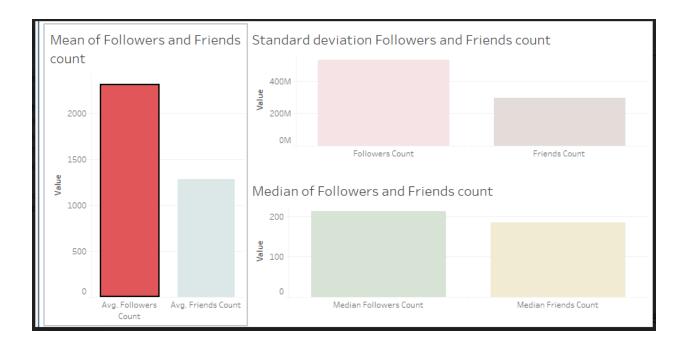
1. Please use Tableau to compare the mean, median, and standard variation of "Followers Count" and "Friends Count" in the SD\_alltweets\_Original excel file using the following procedures:



The above Dashboard explains the following-

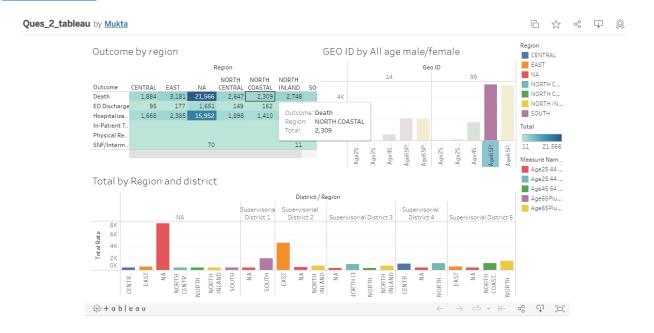
Criteria Taken to compare- Measured Names, Measured Values.

	Followers Count	Friends Count
Mean (Average)	2306	1285
Standard Deviation	24241	12966
Median	212	185

The column Followers count has a greater count in all the values like Mean, Standard Deviation and Median.

2. Please use Tableau to analyze the Lung\_Cancer\_Death data from the Web Exercise 02. (You may use a different data set from the Diego County Open Data Portal if you want: https://www.sandiegocounty.gov/content/sdc/data.html) Create a Dashboard to show your visualization results. Publish this new Dashboard to the Tableau Public Account and include the Web URL and a screenshot of the web dashboard in the report. Write a short paragraph to explain how you created each sheet or the dashboard and how you shared the dashboard to the public via Tableau Public.

### Linkhttps://public.tableau.com/app/profile/mukta5644/viz/Ques\_2\_tableau\_16638757517170/Dashboar d4?publish=yes



### The process of Creation of Tableau Dashboard is as follows-

- 1.Initially I created 3 sheets comparing
  - a) Region vs District -Horizontal Bar Graph -Column (District, Region) | Row (Sum of region)
  - b) Geo ID by all female/male ages **Dual Line Graph** -Column (GEOID, Measure Names) | Row (Measure Values ->Sum (Ages of male + Female))
  - c) Outcome by region- **Highlight Table** -Column (Region) | Row (Count Outcome->Sum (Total Cancer))
- 2. After completing sheets I combined them into the Dashboard using drag and drop.
- 3.To share and publish the dashboard go to-

[Server in Tableau ->Tableau public->Save to Tableau Public->Create account->Sign In->Publish]

# 3. Compare the functions between R and Tableau (including Tableau Public). What are the advantages and disadvantages for each?

Tableau	R
Tableau has a support for R and Python Libraries but still it has some limitations when it comes to detail orientation of the Dashboards.	R can be very detailed as user can orchestrate data as per his need.
It is an interactive platform which is used to create charts, graphs and operation visualization.	R has a more mathematical approach and can deal with more complex problems.
It uses actions like dataset update/dragging/dropping into rows and columns.	It uses operations like data segregation, Console, Terminal and Plots.
Tableau is not affordable for all.	R is affordable and usable for everyone as it is free.
It can support both Mobile and Laptop	Does not support Mobile Visualization.
In Tableau you cannot import already processed data visualizations.	In R, only by importing and running the code you will get precise outputs and visuals.
It is very easy to give inputs to Rows and Columns in Tableau and create required graph.	In R user needs to define the X axis and Y axis objects along with their functions to create a visualization.

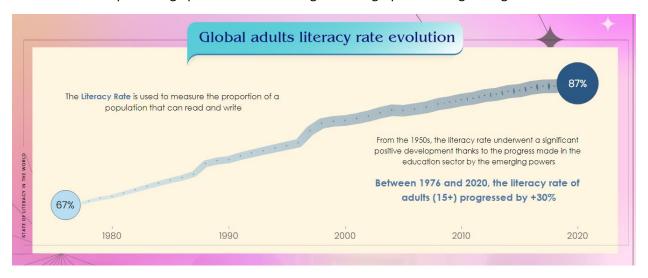
4. Select one good example of data visualization from Tableau Public Gallery
(https://public.tableau.com/en-us/gallery/). Write a short description (100 words) with a screen shot of your example.

## State of Literacy in the World

https://public.tableau.com/app/profile/huong.parrain/viz/StateofLiteracyintheWorld/DataDesign

It is a survey of people that are capable of writing and reading. Many factors are considered in this survey such as Gender differences, age (Youth vs Adult), Regions where there live, income etc.

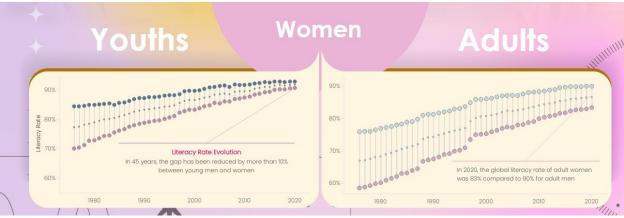
In the survey of global adults, it is observed that literacy rate has an increasing graph from the year (1950 to 2020). Initially, it was sixty-seven percentage whereas now it has become 87 percentage with an increase of 20 percentage points. This shows a growth of graph which a good sign.



After observing the literacy rate graph with respective to gender, we can see that a large part of the illiterate group is Female. But a detailed view of the differentiation tells us that over the past years Youth-Females have an equal literacy ratio as men which is 91 Female: 93 Male that tells us about the spike of literacy in Females. However, adult women have still 7 percent lower literacy rate than men.

In any case, literacy rate is growing in Female that shows a positive affirmation!





Another important criterion mentioned, is income -

Higher Income Countries have High Literacy rate as it is observed in the graphs.

**Yellow->Lower Income Countries** 

**Orange->Lower Middle** 

**Grey->Upper Middle** 

#### Dark Grey->High

With reference to the above analysis, we can conclude that factors such as income, poverty, age play a role in the literacy rate. Nevertheless, the graph shows a positive outcome in the literacy rate over the years.

