

# DSA 557 1.0 Scientific Writing: Assignment 2

**Total marks: 40 marks**

Assignment release date: **28 January 2023**

Due date: **19 February 2023**

Late submission: Submitting late work will be penalized by 1 mark per day. I do not accept any submissions after 28 February 2023.

## **Assignment description:**

In this assignment, you are going to work on a dataset from TidyTuesday project. TidyTuesday is a weekly social data project in R organized by the R for Data Science community. It is a great way of improving your Data wrangling and visualization techniques, sharing and learning from others.

## **TidyTuesday Data Repository**

Every week since 2018, TidyTuesday moderators have provided a weekly challenge focused on the creation of data visualizations based around interesting, timely, or socially-important topics, such as those with data about the Women's World Cup, incarceration trends, and school diversity in the United States. The official TidyTuesday data repository is available at <https://github.com/rfordatascience/tidytuesday> (Scroll down on the page until you see DataSets) section. Select any dataset from this repository for your assignment. Links to data repositories are given below.

[Link to 2018 datasets](https://github.com/rfordatascience/tidytuesday/tree/master/data/2018)

<https://github.com/rfordatascience/tidytuesday/tree/master/data/2018>

[Link to 2019 datasets](https://github.com/rfordatascience/tidytuesday/tree/master/data/2019)

<https://github.com/rfordatascience/tidytuesday/tree/master/data/2019>

[Link to 2020 datasets](https://github.com/rfordatascience/tidytuesday/tree/master/data/2020)

<https://github.com/rfordatascience/tidytuesday/tree/master/data/2020>

[Link to 2021 datasets](https://github.com/rfordatascience/tidytuesday/tree/master/data/2021)

<https://github.com/rfordatascience/tidytuesday/tree/master/data/2021>

[Link to 2022 datasets](https://github.com/rfordatascience/tidytuesday/tree/master/data/2022)

<https://github.com/rfordatascience/tidytuesday/tree/master/data/2022>

[Link to 2023 datasets](https://github.com/rfordatascience/tidytuesday/tree/master/data/2023)

<https://github.com/rfordatascience/tidytuesday/tree/master/data/2023>

## **Task**

Data is just a collection of numbers until you turn it into a story. Here you are trying to deliver the story through data visualization. Visualize data and create a report to tell an engaging story for your data analysis.

- i. Include suitable plots to uncover the stories, patterns in the data.

- ii. Maximum number of plots to be included in the report is 5.
- iii. Interpret the plots.
- iv. Your report should be fully reproducible. You can use Quarto or Jupyter notebook to prepare your report.
- v. Use Python to visualize data.

## Submission

If you use jupyter notebook submit .ipynb file.

If you use Quarto submit .Qmd and .html file

Submit your files via LMS.

## Marks

Total marks: 40 (8 marks for each plot).

- Suitability of the plot: 5 marks
  - Choose the right type of vizualization or chart for your data.
  - Use text and labels to clarify, not clutter.
  - Use color to highlight important information or to differentiate or compare.
  - Avoid misleading visualizations.
  - Keep your visualizations simple and informative.

Interpretation of the chart: 3 marks

## Additional Resources

Tidy Tuesday: A weekly podcast and community activity brought to you by the R4DS Online Learning Community

visit: <https://www.tidytuesday.com/>

## Requesting a deadline extension

You are allowed to apply for a deadline extension for the assignment under the following conditions only.

### Category A

An illness that requires the student to miss all of his or her classes for 2 days or more.

### Category B

A period of grief for the loss of a family member or friend.

### Category C

A family emergency.

Valid documentation of proof is required prior to the assignment deadline.

The philosophy driving our late policy has three goals

- Keep things fair.
- Encourage good time management.
- Encouragement and appreciation of on-time submission students.