Marvel Heroes Data Analysis



Marvel Comics was founded in 1939 in New York City. They have produced some of the most iconic comic book super heroes like Spider Man and Captain America. However, there are many more heroes and characters that you may not have heard of that have come out of this iconic comic company.

For this project, you will be given a dataset on all the heroes within Marvel Comics called ***characters\_stats.csv***. Analyze the data and see what it can tell us.

# Requirements

1. Import required libraries
2. Read the csv
3. Show the first record from the csv
4. Show the number of rows and columns
5. Find the amount of characters who fall under each alignment, you can use value\_counts()
6. Find only the good alignment characters
7. Show only the first five records from the previous bullet point
8. Select the top five heroes with the highest speed who have a good alignment
9. Select five heroes with maximum power who have a good alignment
10. Find out how many superheroes there are with power of 100 with good alignment
11. Shape them what you got in point 10
12. Show all records from point 10
13. Retrieve the first five records with max power and has good alignment
14. Draw a bar plot of all superheroes who are having good alignment and a max power of the top five heroes only , take the same object of point 13, show name and total in plot with green bars
15. Extract villains who having a bad alignment
16. Show first five records of point 15
17. Show top five fastest super villains in terms of super speed
18. Top five super villains in terms of intelligence
19. Show who is most dangerous super villain after calculating their total (top 5 only)
20. Draw a histogram for speed of super heroes having fig size 10.5, provide speed in histogram for only good alignment superheroes, title should be "distribution of speed", xlabel should be "speed"
21. Draw a histogram for combat of super villains having fig size 10.5, provide combat in histogram for only bad alignment superheroes, title should be "distribution of combat", xlabel should be "combat"
22. Explain how you retrieve data with the help of comments in almost each section
23. **Bonus:** You can go beyond the scope and extract different information on different characters and their properties. As well as draw some more plots and histograms.

# Due Date

You have ***1 week*** to complete this project, after which you will present your project.