## Twitter Thread by Andres Segura-Tinoco

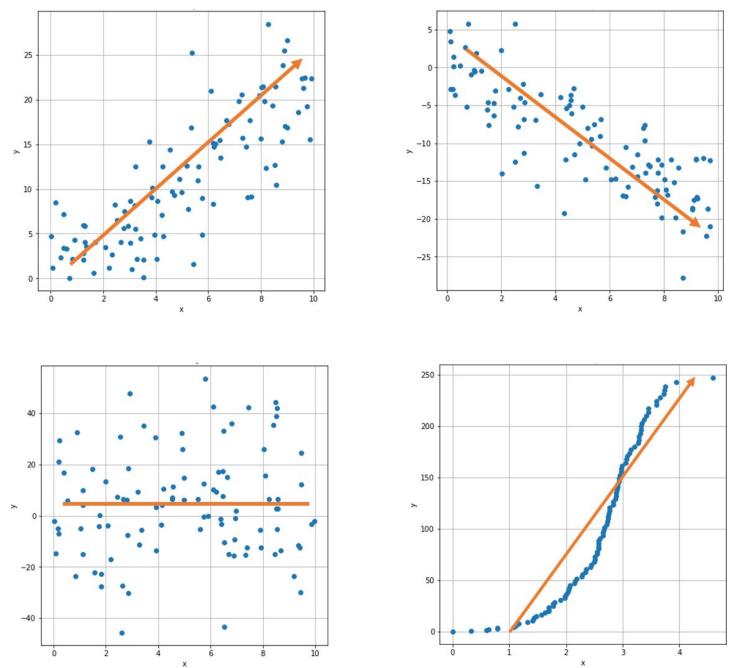




Correlation is the degree and direction in which two variables are related or associated. Therefore, correlation coefficients are used to measure the strength of the relationship between two variables.

Let me tell you about them and their usefulness in #DataAnalytics ■

1/7



A correlation can be positive, meaning that the 2 variables move in the same direction, or negative, meaning that they move in opposite directions. When the correlation is neutral (close to 0) it means that the 2 variables are unrelated.

2/7

Two of the most important correlation coefficients are:

**■**■ Pearson

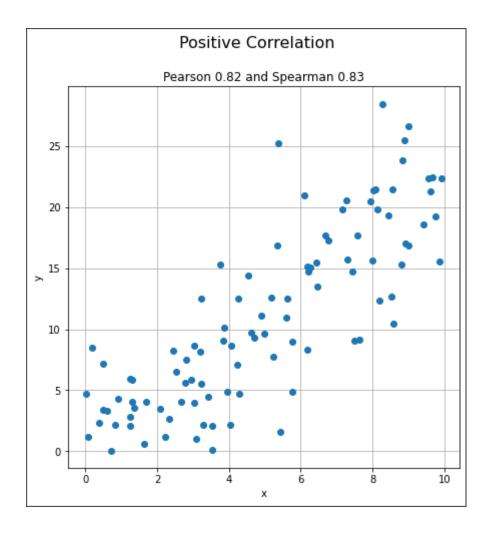
■■ Spearman

and what is the difference between them?

3/7

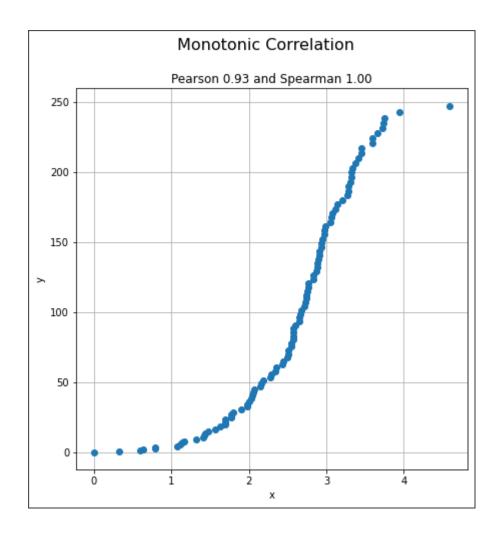
Pearson's correlation coefficient is a statistical measure of the strength of the linear relationship between two numerical variables.

It is a very useful coefficient, but it is also very sensitive to outliers.



Spearman correlation coefficient is a statistical measure of the strength of a monotonic relationship between two variables.

Spearman correlation is less sensitive than the Pearson correlation to outliers.



## And what is its importance?

In many sciences (economics, physics, psychology, etc.) it is of utmost importance, as it allows us to calculate how much and in what way two phenomena are related to each other.

Keep in mind that correlation does not mean causation.

6/7

Finally, let me share with you a <a>@GoogleColab</a> with an example code step-by-step, where I use everything explained previously.

Any additional comments or questions are welcome.

## https://t.co/IQKPG3iMJH

7/7