



# Correlation

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- Correlation is any statistical relationship or association between 2 random variables.
- Correlations are useful because they can indicate a predictive relationship
- Correlation does not imply causation



# Correlation

Correlation commonly refers to the degree to which a pair of variables are **linearly** related.

# Correlation



- Pearson's correlation coefficient (linear relationship)
- Spearman's rank correlation coefficient
- Kendall rank correlation coefficient

# Correlation

## pandas.DataFrame.corr

`DataFrame.corr(method='pearson', min_periods=1)`

[\[source\]](#)

Compute pairwise correlation of columns, excluding NA/null values.

Parameters: **method** : {'pearson', 'kendall', 'spearman'} or callable

Method of correlation:

- pearson : standard correlation coefficient
- kendall : Kendall Tau correlation coefficient
- spearman : Spearman rank correlation
- callable: callable with input two 1d ndarrays

and returning a float. Note that the returned matrix from corr will have 1 along the diagonals and will be symmetric regardless of the callable's behavior.

*New in version 0.24.0.*

# THANK YOU

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