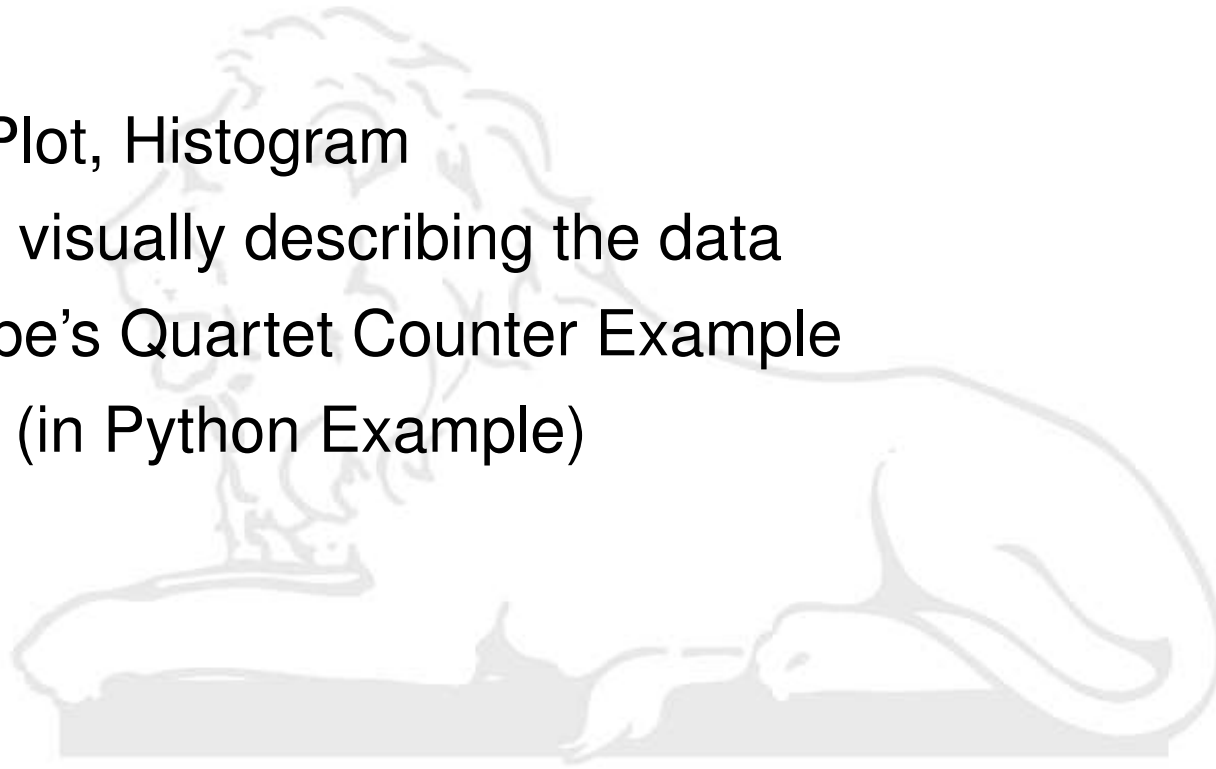


Visually describing the data

- ❑ Scatter Plot, Histogram
- ❑ Need for visually describing the data
- ❑ Anscombe's Quartet Counter Example
- ❑ Box-Plot (in Python Example)

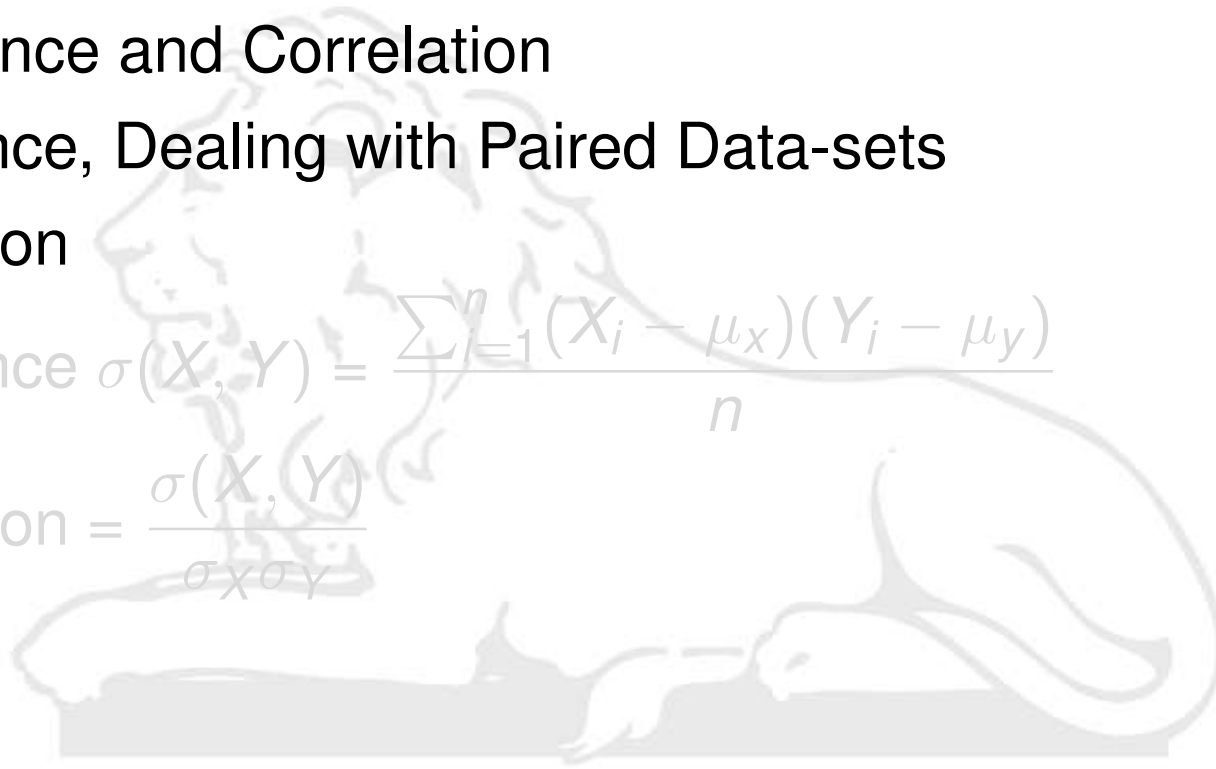


Summary Statistics(multiple data-sets)

- ❑ Co-variance and Correlation
- Covariance, Dealing with Paired Data-sets
- Correlation

❑ Covariance $\sigma(X, Y) = \frac{\sum_{i=1}^n (X_i - \mu_X)(Y_i - \mu_Y)}{n}$

❑ Correlation = $\frac{\sigma(X, Y)}{\sigma_X \sigma_Y}$



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Why is correlation always between -1 to 1?

