Descriptive Statistics

Measures of Central Tendency

Measures of Dispersion

Descriptive Statistics

Measures of Central Tendency

- Mean
- Median
- Mode

Measures of Dispersion

- Range
- Inter Quartile Range
- Standard Deviation
- Variance

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Mean height of men in your neighborhood

Mean height of men in your neighborhood

Median house price in your city

Mean height of men in your neighborhood

Median house price in your city

Standard Deviation of dollar order at the online grocery store

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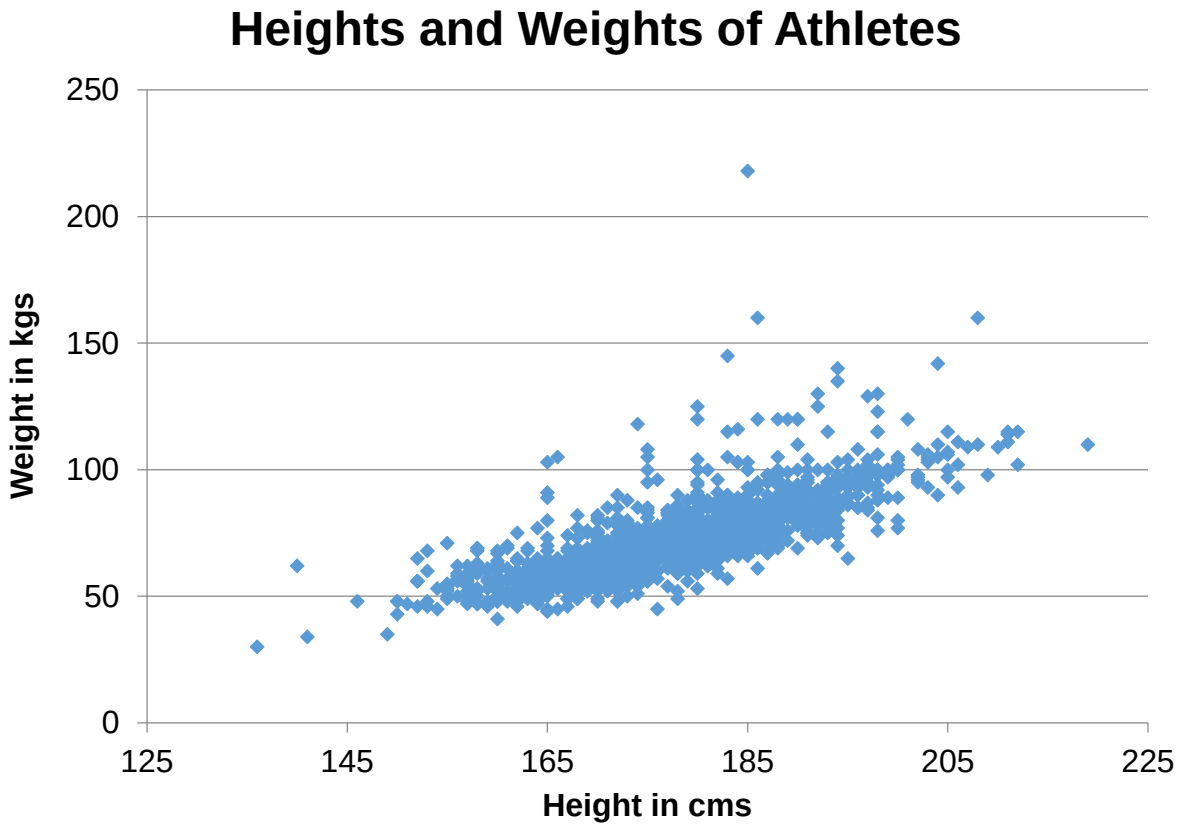
Descriptive Statistics

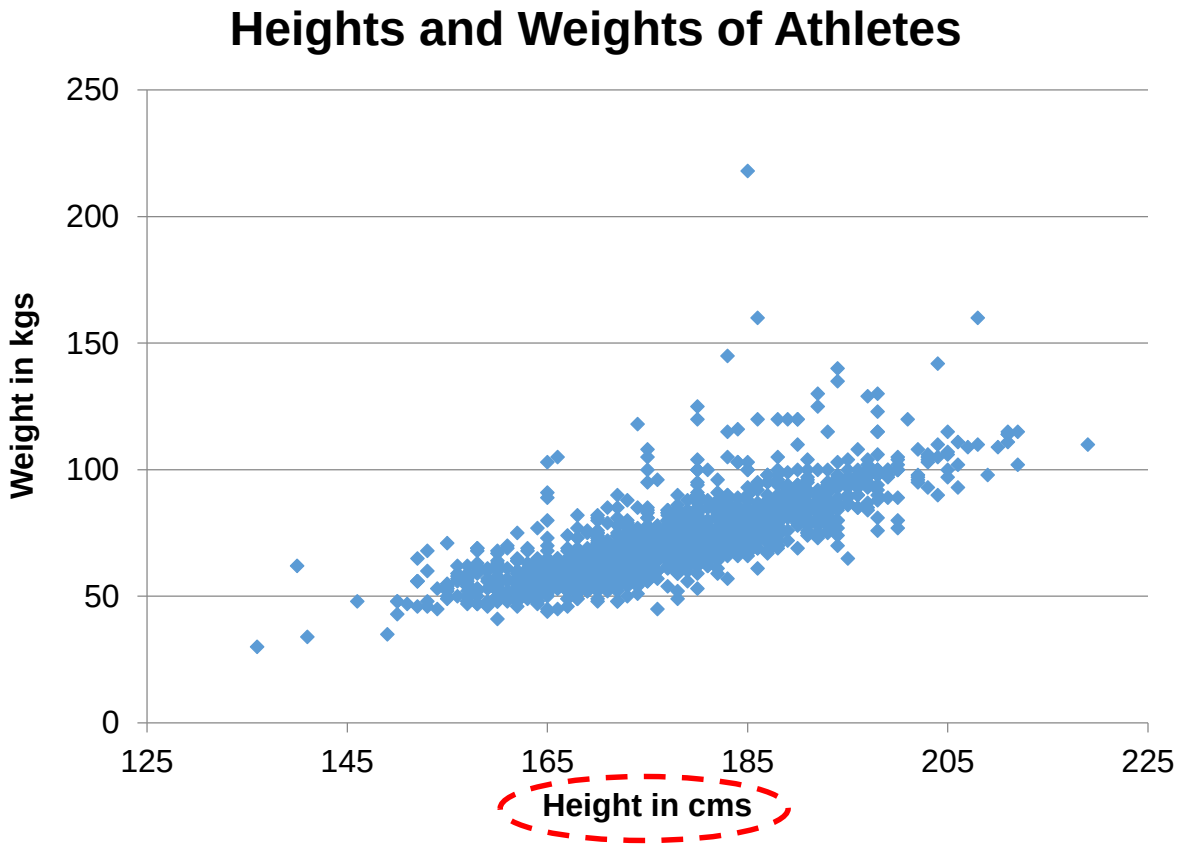
Co-variation amongst two variables

Descriptive Statistics

Co-variation amongst two variables

Measures of Association


Heights and Weights of Athletes
250
200
150
100
50
0
Weight in kgs
125
145
165
185
205
225
Height in cms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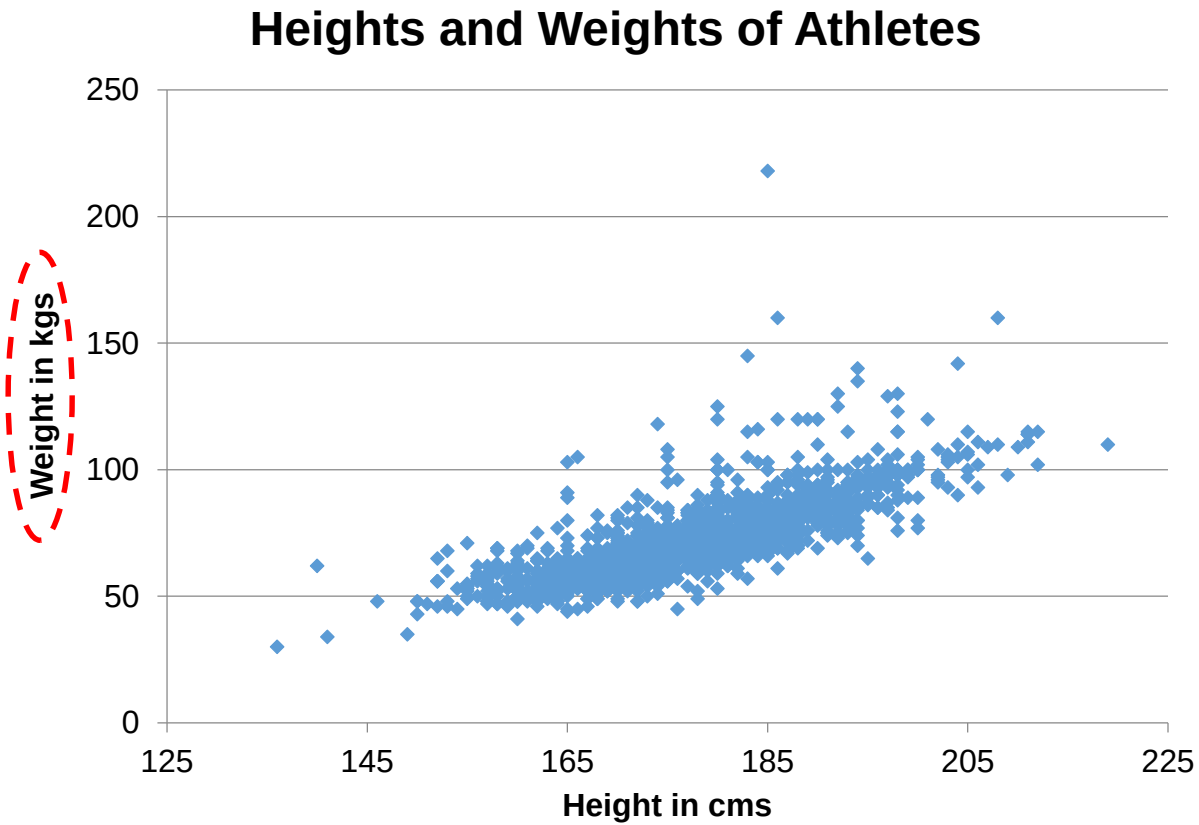
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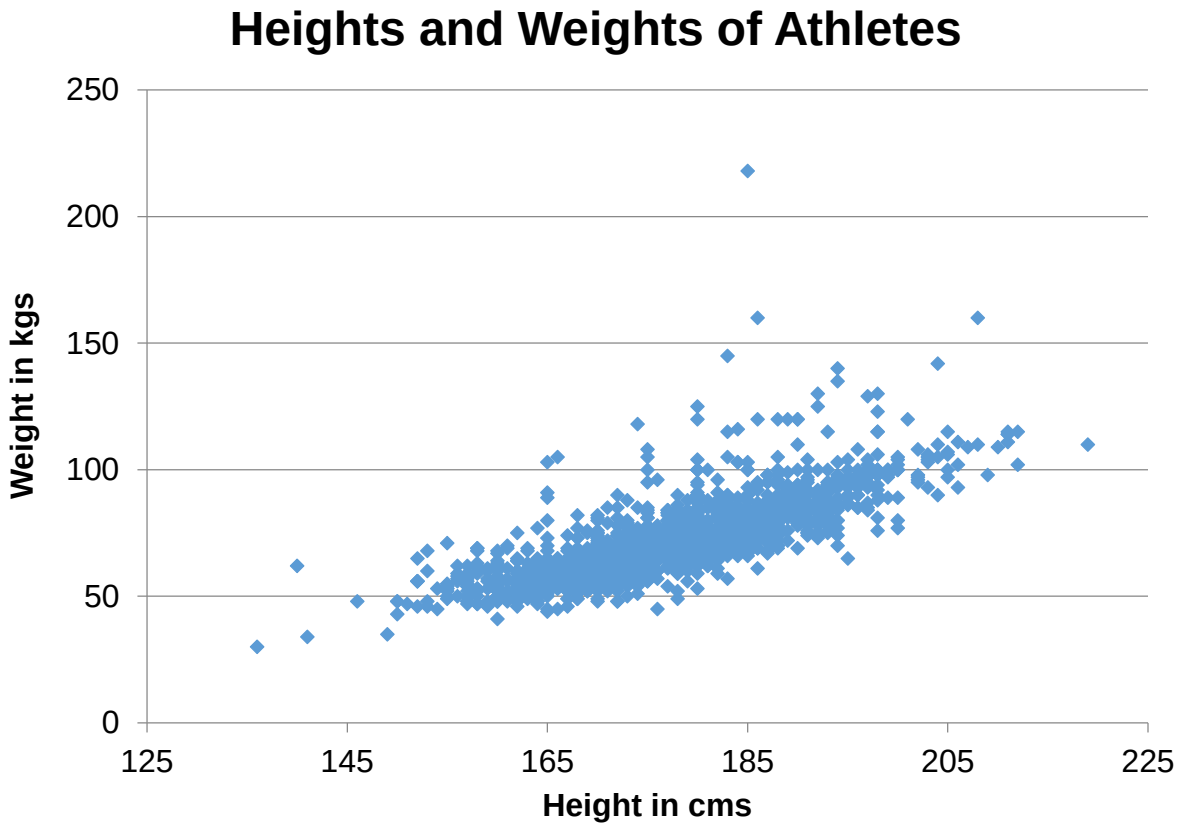
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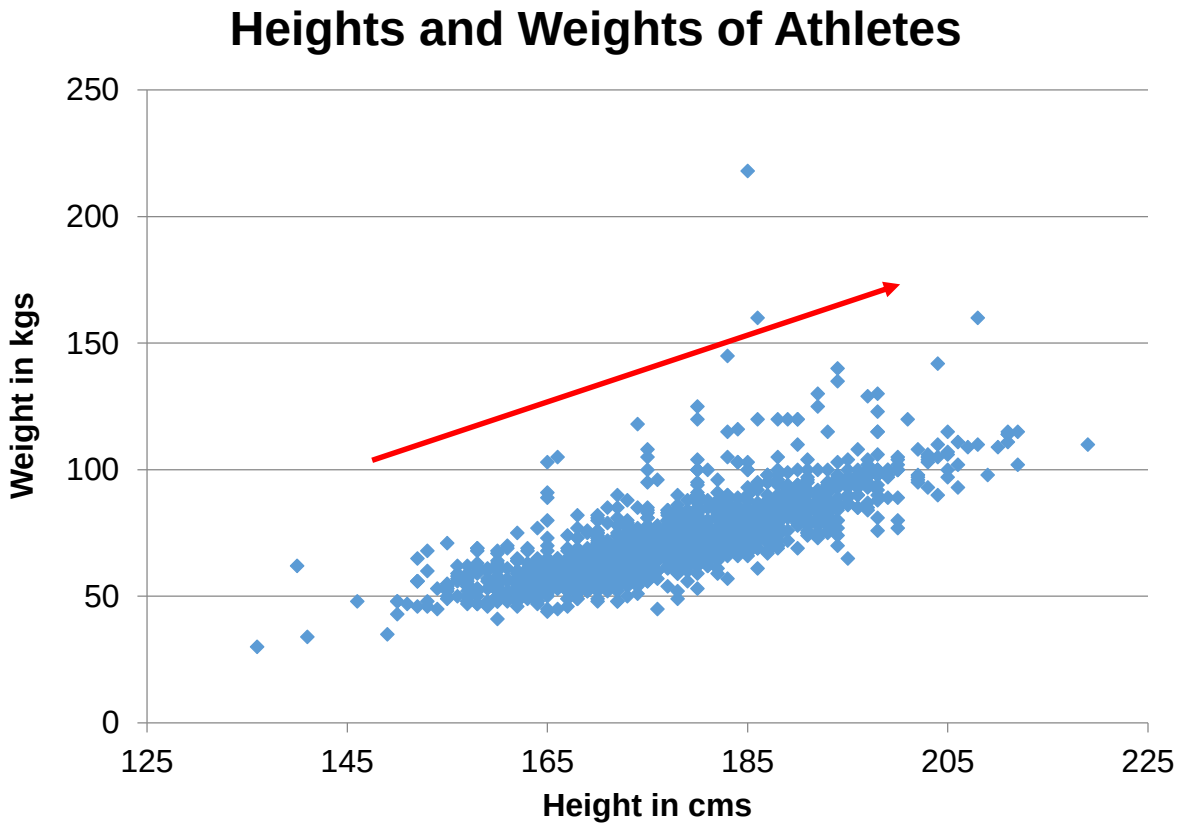
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Measures of Association

Covariance

Correlation

Measures of Association

$$\text{Covariance} = \frac{1}{(n-1)} \sum_{i}^{n} (X_i - \bar{X})\,(Y_i - \bar{Y})$$

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Excel Command (covariance)

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Measures of Association

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